Issuance Date: December 18, 2003
Effective Date: January 01, 2004
Expiration Date: January 01, 2009
First Administrative Amendment: January 15, 2004

AIR OPERATING PERMIT 000068-0

In compliance with the provisions of The State of Washington
Clean Air Act Chapter 70.94 Revised Code of Washington

Alcoa, Inc.
Wenatchee Works
6200 Malaga/Alcoa Highway
Malaga, Washington 98828-9728

is authorized to operate in accordance
with the terms and conditions
of this permit.

Issued by:

State of Washington
DEPARTMENT OF ECOLOGY
300 Desmond Drive
P.O. Box 47600
Olympia, Washington 98504-7600

Approved by:

_____
Carol Kraege, P.E.
Industrial Section Manager

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SECTION I: INTRODUCTION AND LEGAL AUTHORITY

This Air Operating Permit is issued under the procedures established in the Operating Permit Regulation, Chapter 173-401 WAC (Washington Administrative Code). The provisions of this permit describe the emissions limitations, operating requirements, emission monitoring, record keeping requirements, and reporting frequencies for the permitted source.

Alcoa, Inc., Wenatchee Works (Alcoa) requires a Chapter 173-401 WAC Air Operating Permit because Alcoa emits or has the potential-to-emit, one hundred tons per year or more of one or more air pollutants as evidenced by Alcoa's annual emission inventories and Alcoa's monthly air emission reports [WAC 173-401-300(1)].

Terms used in this permit have the meaning assigned to them in the referenced regulations. The definitions of terms contained in WAC 173-401-200, and as defined in all referenced regulations, apply to this permit unless otherwise defined in the permit.

All terms and conditions except state-only requirements are enforceable under the Federal Clean Air Act (FCAA). State-only requirements are specifically identified in the permit.

SECTION II: SPECIFIC TERMS AND CONDITIONS OF THE PERMIT

The permittee is subject to the respective requirements in each of the tables for the specific processes (Table A - H) and is also subject to all the facility-wide generally applicable requirements (Table I). Insignificant emission units (IEUs) and activities are subject to the applicable requirements contained in the facility–wide generally applicable requirements (Table I), however, they are not subject to testing, monitoring, recordkeeping, reporting and certification requirements unless the generally applicable requirements in the State Implementation Plan (SIP) impose them [WAC 173-401-530(2)(c)].

During periods of total facility curtailment (100% of smelting operations are shut down), monitoring, inspections, and recordkeeping requirements can be discontinued if the permittee makes a contemporaneous record in a log or file maintained on site of the date and time of total facility curtailment. Within 30 days of total curtailment, the permittee must provide a written notice to Ecology of the date and time of total curtailment. Reporting requirements shall remain in effect. Upon start-up of the curtailed smelting operations, all requirements in this permit shall come back into effect.

Process Specific Applicable Requirements:

This permit categorizes permit conditions according to Alcoa's aluminum smelter processes. Specifically, green mill (also called the paste plant) permit conditions are contained in Table A; anode baking permit conditions are contained in Table B; anode assembly and rodding permit conditions are contained in Table C; potroom operation permit conditions are contained in Table D; pot rebuild permit conditions are contained in Table E; boiler house permit conditions are contained in Table F; ingot plant/metal products (cast house operations) permit conditions are contained in Table G; and ore handling permit conditions are contained in Table H .

The emission units identified in these tables A - H are the emission units that are subject to specific requirements in addition to the generally applicable facility-wide requirements (in Table I).

In column 6 (Basis of Authority), the more stringent, or specific of multiple citations is listed first. Less stringent, or less specific citations are listed below the higher order requirement (typed in italicized font). [WAC 173-401-600].

Facility-wide Generally Applicable Requirements:

The applicable requirements, test methods, and associated monitoring, recordkeeping and reporting requirements in the “Facility-wide Generally Applicable Requirements,” Table I (pages 76 through 80) apply facility-wide, in addition to a more restrictive condition contained in Table A to Table H.

A. Green Mill					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
GM-3 Liquid Pitch Scrubber Vent (67A)	A.1	Emissions of benzene and toluene	Combined total gaseous organic concentration of benzene and toluene from the exhaust duct shall not exceed one ppm by volume.	The permittee shall conduct source tests upon Ecology's request using EPA Reference Method 18 (EPA RM 18) as per 40 CFR 60, Appendix A, or another EPA approved method.	Order No. 02AQIS-3459
	A.2	Opacity	Opacity shall not exceed 5% for more than six minutes in any sixty minute period.	The permittee shall conduct source tests upon Ecology's request using EPA RM 9 as per 40 CFR 60, Appendix A, or another EPA approved method. If visible emissions are observed at any time, the observation shall be documented and corrective action initiated as soon as practical but not to exceed 24 hours.	
	A.3	System Functional Integrity		The permittee shall conduct a weekly functional integrity inspection of the liquid pitch venting system that, at a minimum, visually checks for the following: visible emissions, leaks, pump outlet pressure, and amperage to recirculation pumps. Initiate corrective action as soon as practical but not to exceed 24 hours. Maintain records of inspections, pump outlet pressure, amperage of recirculation pumps, and corrective actions.	

A. Green Mill					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
	A.4	VOC	VOC from any process equipment other than the exhaust duct shall not be greater than one part per million by volume (1 ppmv) above background or ambient levels. Any VOC leaks shall be repaired within 15 days of detection.	The permittee shall conduct source tests annually or upon Ecology's request using EPA RM 21 as per 40 CFR 60, Appendix A, or another EPA approved method.	
GM-17 Dry Coke Scrubber (40,000 acfm) (GM-17 is the emission point for Green Mill emission units GM-13, GM-14, GM-15, and GM-16)	A.5	Particulate Matter (PM)	Emissions of particulate material shall not exceed 0.005 gr/dscf**.**	The permittee shall conduct a source test once every 5 years and upon Ecology's request. The reference test method is EPA RM 315 as per 40 CFR 60, Appendix A, or another EPA approved method.	Order No. 02AQIS-3459
	A.6	Opacity	Opacity shall not exceed 5% for more than six minutes in any sixty minute period.	The permittee shall conduct source tests upon Ecology's request using EPA RM 9 as per 40 CFR 60, Appendix A, or another EPA approved method. If visible emissions are observed at any time, the observation shall be documented and corrective action initiated as soon as practical but not to exceed 24 hours.	
	A.7	POM (excluding naphthalene)	Emissions of particulate organic matter shall not exceed 0.70 lbs/hr.	The permittee shall conduct a source test once every 5 years and upon Ecology's request. The reference test method is EPA RM 315 per 40 CFR 60, Appendix A, or another EPA approved Method.	

A. Green Mill					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
	A.8	Baghouse Functional Integrity		The permittee shall continuously monitor coke and air flow in accordance with 40 CFR 63.848(f)(1). Conduct a daily visual check for visible emissions per 40 CFR 63.848(g). Comply with Condition No. I.11.	
GM 10 (DC 2 dust collector, 30500 acfm)	A.9	Particulate Material	Emissions of particulate material shall not exceed 0.1 grains/dscf of exhaust gas.	The permittee shall conduct an emission test once every five years and upon Ecology's request. The reference test method is EPA Test Method 5 (40 CFR Part 60, Appendix A, 7/1/03) or another EPA approved method. Comply with Condition No. I.11.	WAC 173-400-060 [effective 3/22/91, approved into the SIP on 8/20/93]
	A.10	Visible Emissions	Opacity shall not exceed an average of 20% opacity for more than six consecutive minutes in any 60-minute period.	The permittee shall conduct an emission test upon Ecology's request. The reference test method is EPA Test Method 9 (40 CFR Part 60, Appendix A, 7/1/03). Comply with Condition No. I11.	WAC 173-415-030(3) [approved into the SIP on 2/19/91; state rule effective 3/22/91]
GM-17 Dry Coke Scrubber (40,000 acfm) (GM-17 is	A.11	POM	Operate and maintain equipment to capture and control POM emissions from the paste plant.	The permittee shall comply with Conditions A.12 through A.13.	40CFR63.843(b)

A. Green Mill					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
the emission point for Green Mill emission units GM-13, GM-14, GM-15, and GM-16)	A.12	Parametric Monitoring for the Paste Plant	Operate, calibrate and maintain a continuous parameter monitoring system for the paste plant emission control device. The average coke flow in the dry coke scrubber shall not be less than 45 percent of rotary vane feeder capacity for any 60 minute period. The average airflow in the dry coke scrubber shall not be less than 75 percent of maximum fan output for any 60 minute period. The permittee may re-determine the upper and/or lower operating limits, as appropriate, based on historical data or other information and submit an application to Ecology to change the applicable limits(s).	The permittee shall continuously monitor and record rotary vane feeder output. Provide the hourly average of the reading taken every five minutes. Continuously monitor and record stack air flow.	40 CFR 63.848(f) and 40 CFR 63.847(h)
	A.13	Visible Emissions	Visually inspect the exhaust stack of the control device on a daily basis for evidence of any VE indicating abnormal operation.	Daily, the permittee shall visually inspect the control device stack for any visible emissions indicating abnormal operation.	40 CFR 63.848(g)

A. Green Mill					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
	A.14	Corrective Action	If a monitoring device for a primary control device measures an operating parameter outside the limits established under Condition No. A.12 [40 CFR Part 63.847(h)], or if visible emissions indicating abnormal operation are observed from the exhaust stack of a control device during a daily inspection, the permittee shall initiate corrective action procedures identified in the startup, shutdown and malfunction plan within one hour . Failure to initiate corrective action procedures within one hour or to take the necessary corrective actions to remedy the problem is a violation	The permittee shall initiate the corrective action procedures identified in the startup, shutdown and malfunction plan within one hour of identification of a problem: (1) if a monitoring device for a primary control device measures an operating parameter outside the limits established under 40 CFR Part 63.847(h); or (2) if visible emissions indicating abnormal operation are observed from the exhaust stack of a control device during a daily inspection. Maintain records of all instances of failure to initiate corrective action procedures within one hour or to take necessary corrective actions to remedy the problem.	40 CFR 63.848(h)
	A.15	Exceedances	No operating parameter limit established under Condition No. A.12 shall be exceeded more than six times in any semiannual period. No more than one exceedance shall be attributed to any given 24 hour period.	The permittee shall submit a semiannual summary report. The first and all subsequent summary reports shall include the dates of each exceedance outside the normal operating ranges and the magnitude of each exceedance. The report shall also identify exceedances of any given operating parameter seven or more times in any semiannual period.	40 CFR 63.848(i)

A. Green Mill					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
	A.16	Accuracy and Calibration	Submit recommended accuracy requirements for review and approval of all monitoring devices required by Condition Nos. A.12 through A.15 [40 CFR Part 63.848]. The submittal must be certified by the permittee to meet the accuracy requirements and must be calibrated in accordance with manufacturer's instructions.	The permittee shall submit recommended accuracy requirements for review and approval within 90 days of permit issuance and within 90 days of any changes made to monitoring devices that may affect their accuracy.	40 CFR 63.848(k)

A. Green Mill					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
	A.17	Startup, Shutdown and Malfunction Plan and Reports	Develop Startup, Shutdown and Malfunction Plans as described in 40 CFR Part 63.6(e)(3).	Within 90 days of permit issuance, the permittee shall develop a written plan that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process and control systems used to comply with the MACT emission standards. In addition to the information required in 40 CFR Part 63.6(e)(3), the plan shall include: (1) procedures, including corrective actions, to be followed if a monitoring device measures an operating parameter outside the limits established in Condition No. A.12, or if visible emissions from an exhaust stack indicating abnormal operation of a control device are observed by the owner or operator during the daily inspection required in Condition No. A.13; and (2) the permittee shall also keep records of each event as required by 40 CFR Part 63.10(b) and record and report if an action taken during startup, shutdown, and malfunction is not consistent with the procedures in the plan as described in 63.6(e)(3)(iv).	40 CFR 63.850(c) and 40 CFR 63.6(e)(3)
	A.18	Excess Emissions Report	The permittee shall submit an excess emissions report, containing information specified in 40 CFR 63.10(e)(3)(v), if measured emissions are in excess of the applicable standard.	If excess emissions are measured, the permittee shall submit an Excess Emissions Report. Submit the reports semiannually unless quarterly reports are required as a result of excess emissions.	40 CFR 63.850(d) and 40 CFR 63.10(e)(3)

A. Green Mill					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
	A.19	Recordkeeping	The permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR Part 63.10(b) and 40 CFR Part 63.850(e).	The permittee shall maintain required files for five years.	40 CFR 63.850(e)

B. Anode Baking					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
BF-10, 11, 12, and 13 A-446 anode bake furnace reactors (160,000 acfm) (4 reactors, 3 stacks each)	B.1	Particulate Material	Emissions of particulate material shall not exceed 0.1 grains/dscf of exhaust gas.	The permittee shall test three times per year, consistent with the schedule for monitoring TF and POM specified in Condition Nos. B.3 and B.4. The reference test method is EPA Test Method 5 or 17 (40 CFR Part 60, Appendix A, 7/1/03) or another EPA approved method. Comply with Condition No. I.11. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]	WAC 173-400-060 [effective 3/22/91, approved into the SIP on 8/20/93]
	B.2	Visible Emissions	Opacity shall not exceed an average of 20% opacity for more than six consecutive minutes in any 60-minute period.	The permittee shall conduct an emission test upon Ecology's request . The reference test method is EPA Test Method 9 (40 CFR Part 60, Appendix A, 7/1/03). Comply with Condition No. I.11. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]	WAC 173-415-030(3) [approved into the SIP on 2/19/91; state rule effective 3/22/91]
	B.3	TF Limit for Anode Bake Furnace	Emissions of total fluoride shall not exceed 0.20 pounds/ton of green anode.	The permittee shall determine the emissions of total fluoride through Condition No. B.6	40 CFR 63.843(c)(1)
	B.4	POM Limit for Anode Bake Furnace	Emissions of POM shall not exceed 0.18 pounds/ton of green anode.	The permittee shall determine the emissions of POM through Condition No. B.6	40 CFR 63.843(c)(2)
	B.5	Performance Test Audit Sample	Analyze performance audit (PA) samples during each performance test.	The permittee shall analyze performance audit (PA) samples during each performance test. The permittee shall request performance audit materials from Ecology 45 days prior to the test date. If Ecology or EPA fail to provide required PA materials to the permittee in time to analyze the PA samples during a performance test, the requirement to conduct a PA shall be waived for such source for that performance test. Waiver under 40 CFR 63.7(c)(4)(iii) does not constitute a waiver of the requirement to conduct a PA for future required performance tests.	40 CFR 63.7(c)(4)(i) & (iii)

B. Anode Baking					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
	B.6	Performance Test Requirements for TF and POM Emissions from the Anode Bake Furnace	Measure and record the emission rate of total fluoride (TF) and POM exiting the exhaust stacks of the primary emission control system for the anode bake furnace.	Annually, the permittee shall conduct at least three runs per year from three randomly selected compartments of the bake oven scrubber (no compartment should be tested more than once in any twelve month period). Use Alcoa Test Methods 4075 and 4076 to determine total fluoride emissions and using test method 315 to determine POM emissions. Compute the emission rate of TF from each anode bake furnace using the following equation: $E_b = (C_s \times Q_{sd})/(P_b \times K)$ Where: E_b = the emission rate of TF, lb/ton of green anodes produced; C_s = the concentration of TF, mg/dscf; Q_{sd} = the volumetric flow rate of effluent gas in dscf/hr; C_{s2} = the concentration of TF as measured for the roof monitor emissions in mg/dscf; P_b = the quantity of green anode material placed in the furnace, ton/hr; and K = conversion factor 453,600 mg/lb; Include all valid runs in the calculation. Compute the emission rate of POM from each anode bake furnace using the following equation: $E_b = (C_s \times Q_{sd})/(P_b \times K)$ Where: E_b = the emission rate of POM, lb/ton of green	40 CFR 63.847(d)(4); 40 CFR 63.847(e)(3) and (4), 40 CFR 63.848(c) and 40 CFR 63.849

B. Anode Baking					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
				anodes produced; C_s = the concentration of POM, mg/dscf; Q_{sd} = the volumetric flow rate of effluent gas in dscf/hr; C_{s2} = the concentration of POM as measured for the roof monitor emissions in mg/dscf; P_b = the quantity of green anode material placed in the furnace, ton/hr; and K = conversion factor 453,600 mg/lb; Include all valid runs in the calculation.	
	B.7	Monitoring Parameters	Operate, calibrate and maintain a continuous parameter monitoring system for each emission control device. The dry alumina scrubber shall not be without any fresh alumina feed for more than 72 hours. The average air flow in the dry alumina scrubber, as determined by individual fan amperage, shall not be more than 430 amps for any eight hour period. The permittee may re-determine the upper and/or lower operating limits, as appropriate, based on historical data or other information and submit an application to Ecology to change the applicable limits(s).	The permittee shall inspect each control device at least once each operating day to ensure the control device is operating properly and record the results of each inspection. Continuously monitor alumina flow from each reactor. Continuously monitor fan amperage from each fan.	40 CFR Part 63.848(f)

B. Anode Baking					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
	B.8	Visible Emissions	Visual inspection of the bake furnace reactor exhaust stack(s).	The permittee shall visually inspect the exhaust stack(s) of each control device on a daily basis for evidence of any visible emissions indicating abnormal operation.	40 CFR 63.848(g)
	B.9	Corrective Action	If a monitoring device for a primary control device measures an operating parameter outside the limits established under 40 CFR Part 63.847(h), or if visible emissions indicating abnormal operation are observed from the exhaust stack of a control device during a daily inspection the permittee shall initiate corrective action procedures identified in the startup, shutdown and malfunction plan within one hour.	The permittee shall initiate the corrective action procedures identified in the startup, shutdown and malfunction plan within one hour of identification of the problem,: (1) if a monitoring device for a primary control device measures an operating parameter outside the limits established under 40 CFR Part 63.847(h); or (2) if visible emissions indicating abnormal operation are observed from the exhaust stack of a control device during a daily inspection. Maintain records of all instances of failure to initiate corrective action procedures within one hour or to take necessary corrective actions to remedy the problem.	40 CFR 63.848(h)
	B.10	Exceedances	No operating parameter limit contained in Condition No. B.7 shall be exceeded more than six times in any semiannual period. No more than one exceedance shall be attributed to any given 24-hour period.	The permittee shall submit a semiannual summary report. The first and all subsequent summary reports shall include the dates of each exceedance outside the normal operating ranges and the magnitude of each exceedance. The report shall also identify exceedances of any given operating parameter seven or more times in any semiannual period.	40 CFR 63.848(i)
	B.11	Weight of Green Anodes	Operate and maintain a monitoring device to determine the daily weight of green anodes placed in the anode bake furnace	The permittee shall record the daily weight of aluminum produced per potline. The weight of green anode material may be determined by monitoring the weight of all anodes or by monitoring the number of anodes placed in the furnace and determining an average weight from the measurements of a representative sample of anodes.	40 CFR 63.848(j)

B. Anode Baking					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
	B.12	Accuracy and Calibration	Submit recommended accuracy requirements for review and approval of all monitoring devices required by Condition Nos. B.7 and B.11 [40 CFR Part 63.848]. The submittal must be certified by the permittee to meet the accuracy requirements and must be calibrated in accordance with manufacturer's instructions	The permittee shall submit recommended accuracy requirements for review and approval within 90 days of startup and when any changes are made to monitoring devices affecting their accuracy.	40 CFR 63.848(k)
	B.13	Performance Test Reports	Submit a summary of all subsequent performance tests to Ecology on an annual basis	The permittee shall submit a summary of all performance tests annually.	40 CFR 63.850(b) and 40 CFR 63.7(g)(1)
	B.14	Startup, Shutdown and Malfunction Plan and Reports	The permittee shall develop and implement a written plan as described in 40 CFR Part 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown and malfunction and a program of corrective action for malfunctioning process and control systems used to comply with the (MACT) standard.	Prior to startup, the permittee shall develop a written plan that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process and control systems used to comply with the MACT emission standards. In addition to the information required in 40 CFR Part 63.6(e)(3), the plan shall include: (1) procedures, including corrective actions, to be followed if a monitoring device measures an operating parameter outside the limits established in Condition No. B7, or if visible emissions from an exhaust stack indicating abnormal operation of a control device are observed by the permittee during the daily inspection required in Condition No. B8. The permittee shall also keep records of each event as required by 40 CFR Part 63.10(b) and record and report if an action taken during	40 CFR 63.850(c) and 40 CFR 63.6(e)(3)

B. Anode Baking					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
				startup, shutdown, and malfunction is not consistent with the procedures in the plan as described in 63.6(e)(3)(iv)	
	B.15	Excess Emissions Report	Submit a report if measured emissions are in excess of the applicable standard in accordance with 40 CFR Part 63.10(e)(3).	The permittee shall submit excess emissions reports in accordance with 40 CFR Part 63.10(e)(3)(v) semiannually unless quarterly reports are required as a result of excess emissions.	40 CFR 63.850(d)
	B.16	Recordkeeping	Maintain files of all information (including all reports and notifications) required by 40 CFR Part 63.10(b) and 40 CFR Part 63.850(e).	The permittee shall maintain required files for five years.	40 CFR 63.850(e)

C. Anode Assembly & Rodding					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
AA-3 Butt crusher (impactor) baghouse (11,803 acfm)	C.1	Particulate Material	Emissions of particulate material shall not exceed 0.005 gr/dscf	The permittee shall conduct an emission test upon Ecology's request. The reference test methods are EPA Test Method 5 (40 CFR Part 60, Appendix A, 7/1/03), or EPA Method 301 equivalent. Comply with Condition No. I.11.	Order No. 02AQIS-3459
	C.2	Visible Emissions	Opacity must not exceed an average of five percent for any six consecutive minutes in any sixty-minute period.	The permittee shall conduct an emission test upon Ecology's request. The reference test method is EPA Test Method 9 (40 CFR Part 60, Appendix A, 7/1/99). If visible emissions are observed at any time, the observation shall be documented and corrective action initiated as soon as practical but not to exceed 24 hours. Comply with Condition No. I.11.	
AA-4 Butt blast baghouse (4,550 acfm)	C.3	Particulate Material	Emissions of particulate material shall not exceed 0.005 gr/dscf	The permittee shall conduct an emission test upon Ecology's request. The reference test methods are EPA Test Method 5 (40 CFR Part 60, Appendix A, 7/1/03), or EPA Method 301 equivalent. Comply with Condition No. I.11.	
	C.4	Visible Emissions	Opacity must not exceed an average of five percent for any six consecutive minutes in any sixty-minute period.	Upon Ecology's request, the permittee shall conduct an emission test. The reference test method is EPA Test Method 9 (40 CFR Part 60, Appendix A, 7/1/99). If visible emissions are observed at any time, the observation shall be documented and corrective action initiated as soon as practical but not to exceed 24 hours. Comply with Condition No. I.11.	
AA-10 Anode cleaning/bath recovery equipment Baghouse (44,000 acfm)	C.5	Particulate Material	Emissions of particulate material shall not exceed 0.005 gr/dscf	The permittee shall conduct an emission test once every five years and upon Ecology's request. The reference test methods are EPA Test Method 17 (40 CFR Part 60, Appendix A, 7/1/03), or another EPA approved method. Comply with Condition No. I.11.	

C. Anode Assembly & Rodding					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
	C.6	Visible Emissions	Opacity must not exceed an average of five percent for any six consecutive minutes in any sixty-minute period.	Upon Ecology's request, the permittee shall conduct an emission test. The reference test method is EPA Test Method 9 (40 CFR Part 60, Appendix A, 7/1/99). If visible emissions are observed at any time, the observation shall be documented and corrective action initiated as soon as practical but not to exceed 24 hours. Comply with Condition No. I.11.	
Mist Collector for Kerosene Lubrication System in the Rod Mill (emissions from the mist collector are vented into the butt blast dust collector)	C.7	Excess Emissions	The kerosene mist collector system and butt blast dust collector system shall be operated such that the associated baghouse will not have excess emissions due to bag failure plugging or bypass.	Comply with Condition Nos. C.3, C.4, and I.11.	
AA-11 Induction furnace baghouse (Lectromelt, 18,000 acfm)	C.8	Particulate Material	Emissions of particulate material shall not exceed 0.005 gr/dscf	The permittee shall conduct an emission test upon Ecology's request. The reference test methods are EPA Test Method 17 (40 CFR Part 60, Appendix A, 7/1/03), or another EPA approved method. Comply with Condition No. I.11.	

C. Anode Assembly & Rodding					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
	C.9	Visible Emissions	Opacity must not exceed an average of five percent for any six consecutive minutes in any sixty-minute period.	The permittee shall conduct an emission test upon Ecology's request. The reference test method is EPA Test Method 9 (40 CFR Part 60, Appendix A, 7/1/99). If visible emissions are observed at any time, the observation shall be documented and corrective action initiated as soon as practical but not to exceed 24 hours. Comply with Condition No. I.11.	
Top Floor 40 Mill Bldg	C.10	Window Closure	Permanently seal windows within 100 feet of bath dust collector baghouse.	No monitoring required.	

D. Potroom Operations					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
Combined emissions from roof vent monitors (PL-0) and dry scrubbers (PL-1-5)	D.1	Particulate	The total emission of particulate matter to the atmosphere from the reduction process (potlines) shall be reduced to the lowest level consistent with reasonably available control technology for primary aluminum plants. The emission of solid particulate shall not exceed fifteen pounds per ton of aluminum produced on a daily basis.	<u>Roof Vent Monitors</u> The permittee shall conduct at least one valid random source test per calendar month for each operating potline. Each source test shall be for a duration of at least one pot cycle. The reference test methods is EPA Test Method 14 (40 CFR Part 60 Appendix A, 7/1/03), in Line 1 Room 6, Line 4 Room 18 and Line 5 Room 20. <u>Primary Control System</u> For dry scrubber emissions, the permittee shall sample one reactor per operating potline per quarter (every three months). All stacks of each reactor shall be sampled for each reactor test. EPA's Test Method 5 or 17 (40 CFR Part 60 Appendix A, 7/1/03) shall be used for sampling. Each primary control system stack of Potlines 1-3 shall be sampled a minimum of four hours per stack (one stack per compartment); each primary control system stack on Potline 4 shall be sampled a minimum of 80 minutes of sampling per stack (three stacks per compartment); and each primary control system stack of Potline 5 shall be sampled a minimum of four hours per stack (one stack per compartment). No primary control system compartment shall be sampled more than once in any twelve month period. The reference test methods shall be used for all sampling. Particulate sampling concurrent with MACT sampling is also acceptable. Calculate the particulate matter emission rate from the potlines using the following equation: $E_p = [(C_{s1} \times Q_{sd})_1 + (C_{s2} \times Q_{sd})_2]/(P \times K)$	WAC 173-415-030(2)

D. Potroom Operations					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
				Where: E_p = the emission rate of PM from a potline in lb/ton; C_{s1} = the concentration of PM from the primary control system in mg/dscf; Q_{sd} = the volumetric flow rate of effluent gas corresponding to the appropriate subscript location in dscf/hr; C_{s2} = the concentration of PM as measured for the roof monitor emissions in mg/dscf; P = the aluminum production rate in ton/hr as determined by dividing the number of hours in the calendar month into the weight of aluminum tapped from the potline during the calendar month that includes the three runs of a performance test; K = conversion factor 453,600 mg/lb; Include all roof monitor tests conducted during the month and the previous four valid reactor source tests for calculation of the monthly particulate emissions. If any calculated monthly particulate emission rate is equal to or greater than 7.5 pounds per ton of aluminum produced Alcoa shall increase the test frequency of the dry scrubbers to monthly (one reactor per potline per month). Alcoa shall continue monthly sampling until three successive monthly particulate emission rates are less than 7.5 pounds of particulate matter per ton of aluminum produced. The permittee shall report results monthly, and include all supporting data from calculation and units and dates tested on a summary sheet. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]	

D. Potroom Operations					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
Combined emissions from roof vent monitors (PL-0) and dry scrubbers (PL-1-5)	D.2	Operation and maintenance Consistent with Good Air Pollution Control Practices	At all times, including periods of abnormal operation and upset, the permittee shall, to the extent practicable, operate and maintain air pollution control equipment in a manner consistent with good air pollution control practice.	Calculate the monthly average potroom secondary TF emissions using CEM data and the CEM-Method 14 correlation established in the test plan approved under condition No. D.28. If the monthly average TF secondary emissions rate for a potroom is maintained at or below 1.9 lbs total fluoride per ton aluminum produced, no additional monitoring is required. Perform comparison monthly, according to the MACT sampling schedule. If 1.7 lbs total fluoride/ton of aluminum produced is exceeded once (except during startup as defined in the SSM plan), the permittee shall submit a report identifying the reason(s) for the exceedance and actions planned for reducing emissions within 30 days of reporting the exceedance. If 1.7 lbs/ton is exceeded a second time in any one potroom during a rolling 12-month period (except during startup as defined in the SSM plan): initiate weekly inspections of the affected potline, using a checklist that incorporates, at a minimum, comments regarding: a) condition of hoods/shields; b) timeliness and effectiveness of needed repairs; c) duration of time the hoods are open; and d) emissions generated by work practices. Commence inspections within 7 days of discovery of second exceedance. Continue until there are no exceedances of 1.7 lbs/ton from the respective potline for a period of 3 consecutive months. It is a violation of this condition if 1.7 lbs total fluoride/ton of aluminum produced is exceeded more than six times in any twelve month period.	WAC 173-415-030(6)

D. Potroom Operations					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
				[WAC 173-401-615(1)(b) & WAC 173-401-630(1)]	
CC-1 Cruce cleaning machine baghouse (23,000 acfm)	D.3	Particulate Material	Emissions of particulate material shall not exceed 0.005 gr/dscf	The permittee shall conduct an emission test once every five years and upon Ecology's request. The reference test methods are EPA Test Method 17 (40 CFR Part 60, Appendix A, 7/1/99), or another EPA approved method. Comply with Condition No. I.11.	Order No. 02AQIS-3459
	D.4	Visible Emissions	Opacity must not exceed an average of five percent for any six consecutive minutes in any sixty-minute period.	The permittee shall conduct an emission test upon Ecology's request. The reference test method is EPA Test Method 9 (40 CFR Part 60, Appendix A, 7/1/03). If visible emissions are observed at any time, the observation shall be documented and corrective action initiated as soon as practical but not to exceed 24 hours. Comply with Condition No. I.11.	
PR-5 Potline 5 primary control system	D.5	Particulate Material	Emissions of particulate material shall not exceed 0.005 gr/dscf	The permittee shall conduct an emission test once every three months and upon Ecology's request. The reference test methods are EPA Test Method 17 (40 CFR Part 60, Appendix A, 7/1/99), or another EPA approved method. Comply with Condition No. I.11.	

D. Potroom Operations					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
	D.6	Visible Emissions	Opacity must not exceed an average of five percent for any six consecutive minutes in any sixty-minute period.	The permittee shall conduct an emission test upon Ecology's request. The reference test method is EPA Test Method 9 (40 CFR Part 60, Appendix A, 7/1/03). If visible emissions are observed at any time, the observation shall be documented and corrective action initiated as soon as practical but not to exceed 24 hours. Comply with Condition No. I.11.	
Potlines 1-5 and PL-0 (roof monitors)	D.7	Pot Impairment and Modification	To assure that no increase in emissions will result from the modification of a potline, Alcoa shall permanently impair a number of pots which would generate an equivalent or greater quantity of emissions than those generated by the newly modified pots. These pots shall be permanently impaired before any modified potline is brought into service. The permanently impaired pots shall be located in one of the T-51 lines which has been operated in the five years prior to the date of the potline modification.	The permittee shall record the pot numbers of each of the pots that were permanently impaired per Condition No. D.8 and record the potline in which the impaired pots are located. These records shall be submitted to Ecology and maintained at the facility. Notify Ecology 30 days prior to startup of any newly modified pots. The equivalency of emissions shall be determined using the following algorithm: Faraday's Law: 1 kilo amp (KA) produces 17.75 lbs of aluminum (A1) per day. Base year: 1995 The theoretical limit at 92% current efficiency (CE) and 102KA being run in unmodified pots is: 102 KA x 17.75 x 365days/yr x 0.92 CE = 607,966 lbs	

D. Potroom Operations					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
	D.8	Records	Record the pot numbers of each of the pots that were permanently impaired per Condition No. D.7 and record the potline in which the impaired pots are located. These records shall be submitted to Ecology and maintained at the facility.	Al/yr/pot. Modifying pots allows the CE to increase to 94%. The load will increase to 103 KA. The modified production rate is 103 x 17.75 x 365 x 0.94 = 627,273 lbs Al/yr/pot. Requirement for equivalent production (no-net-emission-increase) – 103 KA @ 94% CE minus 102KA @92% CE is 627,273 – 607,966 = 19,307 lbs Al/pot/yr increased production. 156 pots/T-51 line x 19,307 lbs Al/pot = 3,011,892 lbs Al/T-51 line increased production per line. Production increase is equivalent to: 3,011,892 / 627,273 = 4.8 pots / line. For each T-51 line modified 5 pots will be taken out of service. 156 pots @ 607,966 lbs Al/pot = 94,842,696 151 pots @ 627,273 lbs Al/pot = 94,718,223 Therefore the impairment of 5 pots per line results in more reduction of production than required. The same algorithm can be used to calculate reductions needed for partial line modification.	
	D.9	Notification	Notify Ecology 30 days prior to startup of any newly modified pots.		
	D.10	NSR and NSPS applicability	Startup of any modified pots without prior permanent equivalent emissions reductions will require compliance with New Source Review (NSR) requirements and with New Source Performance Standards (NSPS).		
	D.11	Impaired Pot Startup	Startup of any impaired pots will require compliance with NSR and NSPS.		

D. Potroom Operations					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
Potlines 1, 2, & 3	D.12	Sulfur Dioxide	Emissions of sulfur dioxide shall not exceed 46 pounds per ton of aluminum produced.	Each shipment of coke shall be tested for sulfur content by ASTM D-3177. Written information from the coke supplier certifying the sulfur content and the method used is an acceptable alternate to testing. SO2 emissions shall be calculated monthly using the production rate, the carbon ratio, sulfur in the anode material, and the sulfur generated as COS, assuming all sulfur not released as COS will be released as SO2. Data will be maintained on site for a minimum of five years for agency review.	PSD-X82-04
	D.13		Emissions of SO2 shall not exceed 2900 tons per year.	The permittee shall calculate annual emissions from the monthly emission and production data. Data will be maintained on site for a minimum of five years for agency review.	
	D.14	Excess Sulfur Dioxide Notification	Notify Ecology of any occurrence of any emissions in excess of the limits specified in condition numbers D.12 and D.13. Such notification shall be sent to Ecology in writing in a timely fashion and no later than ten (10) days, from the date of such occurrence. The notification shall include an estimate of the resultant emissions and a narrative report of the cause, duration and steps taken to correct the problem and avoid a recurrence.	Report as specified.	
Potlines 1-5 and PL-0 (roof monitors)	D.15	Total Fluoride	Emissions of total fluoride to the atmosphere shall not exceed 1.9 pounds/ton of aluminum produced for each potline.	Monthly, the permittee shall determine emissions of total fluoride in accordance with Condition No. D.17.	40 CFR 63.843(a)(1)(i)

D. Potroom Operations					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
	D.16	Performance Test Method Audit Samples	Analyze performance audit samples during each performance test.	The permittee shall analyze performance audit (PA) samples during each performance test. The permittee shall request performance audit materials from Ecology 45 days prior to the test date.	40 CFR 63.7(b)(4)(i)
	D.17	Performance Test Requirements for TF Emissions from Potlines	Measure and record the emission rate of total fluoride (TF) exiting the outlet of the primary control system for each potline and the rate of secondary emissions exiting through each roof monitor.	For each operating potline, conduct a source test at the exhaust of the primary dry scrubber controls using the EPA approved alternative Alcoa Method 4075A-TF/4076TF-94. Conduct all testing per the approved test plan (Condition No. D.28). OPSIS CEM's are used in Rooms 6, 8, 14, 16 and 20 for the secondary roof vent monitoring testing. Monthly, conduct a source test using EPA Method 14 and EPA approved alternative Alcoa Methods 4075A-TF/4076-TF-94. Using this data, update the GF to TF correlation factors semi-annually. Conduct all tests per the approved test plan (Condition No. D.28). Including all valid OPSIS runs, compute and record the monthly average TF emission rate in lbs/TAl. Use the calculation method contained in 40 CFR Part 63.848(d)(1) and (e)(1). Initial and ongoing performance tests must be in accordance with the approved test plan, Subpart A and 40CFR Part 63.7(c)(2)(i)(Condition No. D.28). For each potline, the permittee shall compute and record the monthly average from at least three runs over a complete pot cycle for secondary emissions and the previous 12-month average of all runs from the primary control system. Calculate the TF emission rate from each potline using the following	40 CFR 63.847(d)(1) and 40 CFR 63.848(a)

D. Potroom Operations					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
				equation: $E_p = [(C_{s1} \times Q_{sd})_1 + (C_{s2} \times Q_{sd})_2]/(P \times K)$ Where: E_p = the emission rate of TF from a potline in lb/ton; C_{s1} = the concentration of TF from the primary control system in mg/dscf; Q_{sd} = the volumetric flow rate of effluent gas corresponding to the appropriate subscript location in dscf/hr; C_{s2} = the concentration of TF as measured for the roof monitor emissions in mg/dscf; P = the aluminum production rate in ton/hr as determined by dividing the number of hours in the calendar month into the weight of aluminum tapped from the potline during the calendar month that includes the three runs of a performance test; K = conversion factor 453,600 mg/lb; Include all valid runs in the calculation.	
Potlines 1-5	D.18	Parametric Monitoring for the Potlines	Operate, calibrate and maintain a continuous parameter monitoring system for the dry alumina scrubbers. The average alumina flow in the dry alumina scrubbers for Lines 1-4 shall not be less than 337,435 pounds of alumina per line over any pot cycle (48 hour period (pot cycle) as determined by counting no less than 3110 rotary vane feeder	The permittee shall continuously monitor and record rotary vane feeder output and pounds of alumina fed to the scrubbers. Continuously monitor and record stack air flow.	40 CFR 63.848(f) and 40 CFR 63.847(h)

D. Potroom Operations					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
			minutes during a pot cycle. The average alumina flow in the dry alumina scrubber for Lines 5 shall not be less than 720,000 pounds of alumina per line over any pot cycle (48 hour period) as determined by counting no less than 10,800 rotary vane feeder revolutions during a pot cycle. The average air flow in the dry alumina scrubber shall not be less than 310,000 acfm per line for Lines 1-4 and not less than 330,000 acfm for Line 5. The permittee may re-determine the upper and/or lower operating limits, as appropriate, based on historical data or other information and submit an application to Ecology to change the applicable limits(s).		
	D.19	Visible Emissions	Visually inspect the exhaust stack of the control device on a daily basis for evidence of any VE indicating abnormal operation.	Daily, the permittee shall visually inspect the control device stack for any visible emissions indicating abnormal operation.	40 CFR 63.848(g)
	D.20	Corrective Action	If a monitoring device for a primary control device measures an operating parameter outside the limits established under Condition No. D.18 [40 CFR Part 63.847(h)], or if visible emissions indicating abnormal	The permittee shall initiate the corrective action procedures identified in the startup, shutdown and malfunction plan within one hour of identification of a problem: (1) if a monitoring device for a primary control device measures an operating parameter outside the limits established under 40 CFR Part 63.847(h); or (2) if visible emissions indicating abnormal operation are observed from the exhaust	40 CFR 63.848(h)

D. Potroom Operations					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
			operation are observed from the exhaust stack of a control device during a daily inspection the permittee shall initiate corrective action procedures identified in the startup, shutdown and malfunction plan within one hour.	stack of a control device during a daily inspection. Maintain records of all instances of failure to initiate corrective action procedures within one hour or to take necessary corrective actions to remedy the problem.	
	D.21	Exceedances	No operating parameter limit contained in Condition No. D.18 shall be exceeded more than six times in any semiannual period. No more than one exceedance shall be attributed to any given 24 hour period.	The permittee shall submit a semiannual summary report. The first and all subsequent summary reports shall include the dates of each exceedance outside the normal operating ranges and the magnitude of each exceedance. The report shall also identify exceedances of any given operating parameter seven or more times in any semiannual period.	40 CFR 63.848(i)
	D.22	Weight of Aluminum	Operate and maintain a monitoring device to determine the daily weight of aluminum produced.	The permittee shall record the daily weight of aluminum produced per potline.	40 CFR 63.848(j)
	D.23	Accuracy and Calibration	Submit recommended accuracy requirements for review and approval of all monitoring devices required by Condition Nos. D.18 through D.22 [40 CFR Part 63.848]. The submittal must be certified by the permittee to meet the accuracy requirements and must be calibrated in accordance with manufacturer's instructions	The permittee shall submit recommended accuracy requirements for review and approval within 90 days of startup and when any changes are made to monitoring devices affecting their accuracy.	40 CFR 63.848(k)
	D.24	Performance Test Reports	Submit a summary of all subsequent performance tests to Ecology on an annual basis	The permittee shall submit a summary of all performance tests annually.	40 CFR 63.850(b) and 40 CFR

D. Potroom Operations					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
					63.7(g)(1)
Potlines 1-5 and PL-0 (roof monitors)	D.25	Startup, Shutdown and Malfunction Plan and Reports	Develop and implement a written plan as described in 40 CFR Part 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown and malfunction and a program of corrective action for malfunctioning process and control systems used to comply with the (MACT) standard.	Prior to startup, the permittee shall develop a written plan that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process and control systems used to comply with the MACT emission standards. In addition to the information required in 40 CFR Part 63.6(e)(3), the plan shall include: (1) procedures, including corrective actions, to be followed if a monitoring device measures an operating parameter outside the limits established in Condition No. D.18, or if visible emissions from an exhaust stack indicating abnormal operation of a control device are observed by the permittee during the daily inspection required in Condition No. D.19. The permittee shall also keep records of each event as required by 40 CFR Part 63.10(b) and record and report if an action taken during startup, shutdown, and malfunction is not consistent with the procedures in the plan as described in 63.6(e)(3)(iv)	40 CFR 63.850(c) and 40 CFR 63.6(e)(3)
	D.26	Excess Emissions Report	Submit a report if measured emissions are in excess of the applicable standard in accordance with 40 CFR Part 63.10(e)(3).	The permittee shall submit excess emissions reports in accordance with 40 CFR Part 63.10(e)(3)(v) semiannually unless quarterly reports are required as a result of excess emissions.	40 CFR 63.850(d)
	D.27	Recordkeeping	Maintain files of all information (including all reports and notifications) required by 40 CFR Part 63.10(b) and 40 CFR Part 63.850(e).	The permittee shall maintain required files for five years.	40 CFR 63.850(e)
	D.28	Test plan	Before conducting a required performance test, the permittee shall develop and, if requested by Ecology, submit a site-	The permittee shall submit a test plan if requested by Ecology.	40 CFR 63.7(c)(2)(i)

D. Potroom Operations					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
			specific test plan to Ecology for approval. The test plan shall include a test program summary, the test schedule, data quality objectives, and both an internal and external quality assurance (QA) program. Data quality objectives are the pretest expectations of precision, accuracy, and completeness of data.		

E. Pot Rebuild					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
SPL-1 Spent Pot Liner processing baghouse (75,000 acfm)	E.1	Particulate Material	Emissions of particulate material shall not exceed 0.005 gr/dscf	The permittee shall conduct an emission test every five years and upon Ecology's request. The reference test methods are EPA Test Method 17 (40 CFR Part 60, Appendix A, 7/1/03), or another EPA approved method. Comply with Condition No. I.11.	Order No. 02AQIS-3459
	E.2	Visible Emissions	Opacity must not exceed an average of five percent for any six consecutive minutes in any sixty-minute period.	The permittee shall conduct an emission test upon Ecology's request. The reference test method is EPA Test Method 9 (40 CFR Part 60, Appendix A, 7/1/03). If visible emissions are observed at any time, the observation shall be documented and corrective action initiated as soon as practical but not to exceed 24 hours. Comply with Condition No. I.11.	

F. Boiler House					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
BH-1 and 2 Boilers 1 and 2	F.1	Particulate Material	Emissions of particulate material shall not exceed 0.1 gr/dscf	The permittee shall conduct an emission test upon Ecology's request. The reference test methods are EPA Test Method 5 or 17 (40 CFR Part 60, Appendix A, 7/1/03). Monitor natural gas usage. Annually, calculate emissions using AP-42 emission factors or EPA reference methods. Comply with Condition No. I.11. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]	WAC 173-400-050(1)
	F.2	Visible Emissions	Opacity must not exceed an average of twenty percent for any six consecutive minutes in any sixty-minute period.	The permittee shall conduct an emission test upon Ecology's request. The reference test method is EPA Test Method 9 (40 CFR Part 60, Appendix A, 7/1/99). The permittee shall certify that only natural gas was used during the reporting period. If oil was used, conduct weekly visual checks (Method 9 is not required) for VE. If no VE are observed, this condition shall be recorded. IF VE are present, the permittee shall initiate corrective action as soon as practical but not to exceed 24 hours. The condition and actions taken shall be recorded. If no VE are observed during 10 consecutive weekly observations, required frequency is reduced to monthly. If VE are observed at any time, weekly observations shall resume. Comply with Condition No. I.11. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]	WAC 173-415-030(3)

G. Metal Products					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.1	Particulate Material	Emissions of particulate material shall not exceed 0.1 gr/dscf	The permittee shall conduct an emission test upon Ecology's request. The reference test methods are EPA Test Method 17 (40 CFR Part 60, Appendix A, 7/1/03), or another EPA approved method. Comply with Condition No. G.3 Comply with Condition No. I.11. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]	WAC 173-400-050(1)
	G.2	Visible Emissions	Opacity must not exceed an average of twenty percent for any six consecutive minutes in any sixty-minute period.	The permittee shall conduct an emission test upon Ecology's request. The reference test method is EPA Test Method 9 (40 CFR Part 60, Appendix A, 7/1/99). Weekly visual checks for VE shall be made. If no VE is observed this condition shall be recorded. Except during maintenance fluxing, if VE are present, the permittee shall initiate corrective action as soon as practical but not to exceed 24 hours. The condition and actions taken shall be recorded. If no VE are observed during 10 consecutive weekly observations, required frequency is reduced to monthly. If VE are observed at any time, weekly observations shall resume. Comply with Condition No. I.11. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]	WAC 173-415-030(3)
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.3	Secondary Aluminum Processing Unit - Particulate Matter	For each secondary aluminum processing unit, the permittee must not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average	On and after the date of approval of the operation, maintenance and monitoring (OM&M) plan, the permittee shall comply with the emission limits calculated using the equation for PM. Use the following individual emission unit limits	40 CFR 63.1505(k)(1); 63.1505(i)(1); 63.1505(j)(2) & (3); 63.1505(i)(6); and 63.1505(j)(5)

G. Metal Products					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
			emissions of PM in excess of: $L_{CPM} = \frac{\sum_{i=1}^{n}(L_{tiPM} \times T_{ti})}{\sum_{i=1}^{n}(T_{ti})}$ Where, L_{tiPM} = The PM emission limit for individual emission unit i for a group 1 furnace or for an in-line fluxer; T_{ti} = The feed/charge rate for individual emission unit i; and L_{cPM} = The PM emission limit for the secondary aluminum processing unit.	for calculating the PM emission limit for the SAPU: The permittee must not exceed 0.20 kg of PM per Mg (0.40 lb of PM per ton) of feed/charge from a group 1 furnace, that is not a melting/holding furnace processing only clean charge (40 CFR Part 63.1505(i)(1)); and The permittee must not exceed 0.005 kg of PM per Mg (0.01 lb of PM per ton) of feed/charge from an in-line fluxer (40 CFR Part 63.1505(j)(2)) except that these emission limits do not apply to an in-line fluxer that uses no reactive flux materials (40 CFR Part 63.1505(j)(3)). However, the permittee may determine the emission standards for a SAPU by applying the group 1 furnace limits on the basis of the aluminum production weight in each group 1 furnace, rather than on the basis of feed/charge (40 CFR Part 63.1505(i)(6)), and, the permittee may determine the emission standards for a SAPU by applying the in-line fluxer limits on the basis of the aluminum production weight in each in-line fluxer, rather than on the basis of feed/charge (40 CFR Part 63.1505(j)(5)).	
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.4	Secondary Aluminum Processing Unit - Hydrogen Chloride	For each secondary aluminum processing unit, the permittee must not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of HCl in excess of:	On and after the date of approval of the operation, maintenance and monitoring (OM&M) plan, the permittee must comply with the emission limits calculated using the equation for HCl. Use the following individual emission unit limits for calculating the HCl emission limit for the SAPU:	40 CFR 63.1505(k)(2); 63.1505(i)(4); 63.1505(j)(1) & (3); 63.1505(i)(6); and 63.1505(j)(5)

G. Metal Products					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
			$L_{CHCl} = \frac{\sum_{i=1}^{n} (L_{tiHCl} \times T_{ti})}{\sum_{i=1}^{n} (T_{ti})}$ Where, L_{tiHCl} = The HCl emission limit for individual emission unit i for a group 1 furnace or for an in-line fluxer; and L_{cHCl} = The HCl emission limit for the secondary aluminum processing unit.	The permittee must not exceed 0.20 kg of HCl per Mg (0.40 lb of HCl per ton) of feed/charge for a group 1 furnace (40 CFR Part 63.1505(i)(4)); and The permittee must not exceed 0.02 kg of HCl per Mg (0.04 lb of HCl per ton) of feed/charge from an in-line fluxer (40 CFR Part 63.1505(j)(1)) except that these emission limits do not apply to an in-line fluxer that uses no reactive flux materials(40 CFR Part 63.1505(j)(3)). However, the permittee may determine the emission standards for a SAPU by applying the group 1 furnace limits on the basis of the aluminum production weight in each group 1 furnace, rather than on the basis of feed/charge(40 CFR Part 63.1505(i)(6)), and, the permittee may determine the emission standards for a SAPU by applying the in-line fluxer limits on the basis of the aluminum production weight in each in-line fluxer, rather than on the basis of feed/charge (40 CFR Part 63.1505(j)(5)).	
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.5	Secondary Aluminum Processing Unit - Dioxins and Furans	For each secondary aluminum processing unit, the permittee must not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of D/F in excess of:	On and after the date of approval of the operation, maintenance and monitoring (OM&M) plan, the permittee must comply with the emission limits calculated using the equation for D/F. Use the following individual emission unit limits for calculating the D/F emission limit for the SAPU: The permittee must not exceed 15 ug of D/F TEQ per Mg (2.1 x 10-4 gr of D/F TEQ per	40 CFR 63.1505(k)(3); 63.1505(i)(3); and 63.1505(i)(6)

G. Metal Products					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
			$L_{CD/F} = \frac{\sum_{i=1}^{n} (L_{tiD/F} \times T_{ti})}{\sum_{i=1}^{n} (T_{ti})}$ Where, $L_{tiD/F}$ = The D/F emission limit for individual emission unit i for a group 1 furnace; and $L_{cD/F}$ = The D/F emission limit for the secondary aluminum processing unit.	ton) of feed/charge from a group 1 furnace. This limit does not apply if the furnace processes only clean charge (40 CFR Part 63.1505(i)(3)). However, The permittee may determine the emission standards for a SAPU by applying the group 1 furnace limits on the basis of the aluminum production weight in each group 1 furnace, rather than on the basis of feed/charge (40 CFR Part 63.1505(i)(6)).	
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.6	Secondary Aluminum Processing Unit (SAPU)	Demonstrate compliance with the emission limits of Condition Nos. G.3 to G.5 (40 CFR Part 63.1505(k)(1)-(3)) by demonstrating that each emission unit within the SAPU is in compliance with the applicable emission limits of 40 CFR Part 63.1505(i) and (j).	The permittee may demonstrate compliance with the emission limits of Condition Nos. G.3 to G.5 by demonstrating compliance with the following individual emission unit limits: For a group 1 furnace that is not a melting/holding furnace processing only clean charge, the permittee must not exceed: 0.20 kg of PM per Mg (0.40 lb of PM per ton) of feed/charge; and 0.20 kg of HCl per Mg (0.40 lb of HCl per ton) of feed/charge; 15 ug of D/F TEQ per Mg (2.1 x 10-4 gr of D/F TEQ per ton) of feed/charge. The D/F limit does not apply if the furnace processes only clean charge (40 CFR Part 63.1505(i)(3). For an in-line fluxer that uses no reactive flux material, the permittee must not exceed: 0.005 kg of PM per Mg (0.01 lb of PM per	40 CFR 63.1505(k)(4)

G. Metal Products					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
				ton) of feed/charge; and 0.02 kg of HCl per Mg (0.04 lb of HCl per ton) of feed/charge (40 CFR Part 63.1505(j)(1).	
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.7	Labeling	Provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace and in-line fluxer that identifies the applicable emission limits and means of compliance, including: (1) The type of affected source or emission unit (e.g., group 1 furnace, group 2 furnace, in-line fluxer); and (2) The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.	The permittee shall inspect the labels for each group 1 furnace, group 2 furnace and in-line fluxer at least once per calendar month to confirm that posted labels as required by the operational standard in §63.1506(b) are intact and legible.	40 CFR 63.1506(b); and 63.1510(c)
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.8	Feed/Charge Weight	For each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge, the permittee must: (1) Except as provided in paragraph (3) of this	For each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or ug/Mg (gr/ton) of feed/charge the permittee shall install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emission unit over	40 CFR 63.1506(d); and 63.1510(e)

G. Metal Products					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
			condition, install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; (2) Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan; and (3) The permittee may choose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that: (i) The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and (ii) All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.	the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. The accuracy of the weight measurement device or procedure must be +/- 1 percent of the weight being measured. The permittee shall verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.	

G. Metal Products					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.9	Site Specific Monitoring Plan	The permittee must, for each group 1 furnace (including a group 1 furnace that is part of a secondary aluminum processing unit) without add-on air pollution control devices: (1) Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test; (2) Operate each furnace in accordance with the work practice/pollution prevention measures documented in the OM&M plan and within the parameter values or ranges established in the OM&M plan; and (3) Operate each group 1 melting/holding furnace subject to the emission standards in §63.1505(i)(2) using only clean charge as the feedstock.	The permittee shall develop, in consultation with the applicable permitting authority, a written site-specific monitoring plan. The permittee shall submit the site-specific monitoring plan to Ecology for review by September 24, 2002 or six months prior to startup, whichever is later. (1) The site-specific monitoring plan must be part of the OM&M plan that addresses monitoring and compliance requirements for PM, HCl, and D/F emissions; (2) Each site-specific monitoring plan must document each work practice, equipment/design practice, pollution prevention practice, or other measure used to meet the applicable emission standards; (3) Each site-specific monitoring plan must include provisions for unit labeling as required in Condition No. G.7 (40 CFR Part 63.1510(c), feed/charge weight measurement (or production weight measurement) as required in Condition No. G.8 (40 CFR Part 63.1510(e) and flux weight measurement as required in Condition No. G.12 (40 CFR Part 63.1510(j); (4) Each site-specific monitoring plan for a melting/holding furnace subject to the clean charge emission standard in §63.1505(i)(3) must include these requirements: (a) The permittee shall record the type of feed/charge (e.g., ingot, thermally dried chips, dried scrap, etc.) for each operating cycle or time period used in the performance test; and (b) The permittee shall submit a certification of compliance with the applicable operational standard for clean charge materials in §63.1506(n)(3) for each 6-month reporting period. Each certification must	40 CFR 63.1506(n); 63.1510(o); 63.1510(p); and 63.1510(q)

G. Metal Products					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
				contain the information in §63.1516(b)(2)(iv); (5) If a site-specific monitoring plan includes a scrap inspection program for monitoring the scrap contaminant level of furnace feed/charge materials, the plan must include the following provisions for the demonstration and implementation of the program (40 CFR Part 63.1510(p)): (a) A proven method for collecting representative samples and measuring the oil and coatings content of scrap samples; (b) A scrap inspector training program; (c) An established correlation between visual inspection and physical measurement of oil and coatings content of scrap samples; (d) Periodic physical measurements of oil and coatings content of randomly-selected scrap samples and comparison with visual inspection results; (e) A system for assuring that only acceptable scrap is charged to an affected group 1 furnace; and (f) Recordkeeping requirements to document conformance with plan requirements; and (6) If a site-specific monitoring plan includes a calculation method for monitoring the scrap contaminant level of furnace feed/charge materials, the plan must include the following provisions for the demonstration and implementation of the program (40 CFR Part 63.1510(q)): Any group 1 furnace dedicated to processing a distinct type of furnace feed/charge composed of scrap with a uniform composition (such as rejected product from a manufacturing process for which the coating-to-scrap ratio can be documented)	

G. Metal Products					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
				may include a program in the site-specific monitoring plan for determining, monitoring, and certifying the scrap contaminant level using a calculation method rather than a scrap inspection program. A scrap contaminant monitoring program using a calculation method must include: (a) Procedures for the characterization and documentation of the contaminant level of the scrap prior to the performance test. (b) Limitations on the furnace feed/charge to scrap of the same composition as that used in the performance test. If the performance test was conducted with a mixture of scrap and clean charge, limitations on the proportion of scrap in the furnace feed/charge to no greater than the proportion used during the performance test. (c) Operating, monitoring, recordkeeping, and reporting requirements to ensure that no scrap with a contaminant level higher than that used in the performance test is charged to the furnace.	
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.10	Corrective Action	Initiate corrective action when a process parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan.	Whenever a process parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the permittee's corrective action shall restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable, in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken shall include follow-up actions necessary to	40 CFR 63.1506(p)

G. Metal Products					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
				return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.	
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.11	Operation, Maintenance, and Monitoring (OM&M) Plan	Prepare and implement for each existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan.	The permittee shall submit the plan to Ecology for review and approval on or before the date of the initial performance test required by Condition No. G.17. Pending approval by Ecology of an initial or amended plan, the permittee shall comply with the provisions of the submitted plan. Each plan must contain the following information: (1) Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device; (2) A monitoring schedule for each affected source and emission unit; (3) Procedures for the proper operation and maintenance of each process unit used to meet the applicable emission limits or standards in §63.1505; (4) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including: (i) Calibration and certification of accuracy of each monitoring device, at least once every 3 months, according to the manufacturer's instructions; and (ii) Procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in subpart A of 40 CFR Part 63; (5) Procedures for monitoring process parameters, and if applicable, the procedure to be used for determining charge/feed (or	40 CFR 63.1510(b)

G. Metal Products					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
				throughput) weight if a measurement device is not used; (6) Corrective actions to be taken when process or operating parameters deviate from the value or range established in number (1) above of this Requirement, including: (i) Procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and (ii) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed; (7) A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance; and (8) Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in Condition No. G.9 (40 CFR Part 63.1510(o)) for each group 1 furnace not equipped with an add-on air pollution control device. Any subsequent changes to the plan must be submitted to Ecology for review and approval.	
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.12	Total Reactive Flux Injection Rate	For all group 1 furnaces or in-line fluxers, the permittee must install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or liquid reactive flux injected to each affected source or	(1) The permittee shall verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months. (2) For each operating cycle or time period used in the performance test, the permittee shall calculate and record the gaseous or liquid reactive flux injection rate (kg/Mg or lb/ton	40 CFR 63.1510(j)

G. Metal Products					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
			emission unit. (i) The monitoring system must record the weight for each 15-minute block period, during which reactive fluxing occurs, over the same operating cycle or time period used in the performance test. (ii) The accuracy of the weight measurement device must be +/- 1 percent of the weight being measured. The permittee may apply to the permitting authority for permission to use a weight measurement device of alternative accuracy in cases where the reactive flux flow rates are so low as to make the use of a weight measurement device of +/- 1 percent impracticable. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards.	using the procedure in Condition No. G.25 (40 CFR Part 63.1512(o)). (3) The permittee shall record, for each 15-minute block period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of: (i) Gaseous or liquid reactive flux other than chlorine; and (ii) Solid reactive flux. (4) The permittee shall, for each operating cycle or time period used in the performance test, calculate and record the total reactive flux injection rate using the procedure in Condition No. G.25 (40 CFR Part 63.1512(o)).	
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.13	Site-specific Requirements for Secondary Aluminum Processing Units	Develop OM&M plans for each secondary aluminum processing unit (SAPU).	(1) For each secondary aluminum processing unit the permittee shall include, within the OM&M plan prepared in accordance with Condition No. G.11 (40 CFR Part 63.1510(b)), the following information: (i) The identification of each emission unit in	40 CFR 63.1510(s)

G. Metal Products					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
				the secondary aluminum processing unit; (ii) The specific control technology or pollution prevention measure to be used for each emission unit in the secondary aluminum processing unit and the date of its installation or application; (iii) The emission limit calculated for each secondary aluminum processing unit and performance test results with supporting calculations demonstrating initial compliance with each applicable emission limit; (iv) Information and data demonstrating compliance for each emission unit with all applicable design, equipment, work practice or operational standards of this subpart; and (v) The monitoring requirements applicable to each emission unit in a secondary aluminum processing unit and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average using the procedure in Condition No. G.14 (40 CFR Part 63.1510(t)). (2) The SAPU compliance procedures within the OM&M plan may not contain any of the following provisions: (i) Any averaging among emissions of differing pollutants; (ii) The inclusion of any affected sources other than emission units in a secondary aluminum processing unit; (iii) The inclusion of any emission unit while it is shutdown; or (iv) The inclusion of any periods of startup, shutdown, or malfunction in emission calculations. (3) To revise the SAPU compliance provisions within the OM&M plan prior to the end of the	

G. Metal Products					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
				permit term, the permittee must submit a request to Ecology containing the information required by paragraph (s)(1) of this section and obtain approval of Ecology prior to implementing any revisions.	
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.14	PM, HCl, D/F 3 day and 24 hour rolling averages	Except as provided in Condition No. G.15 (40 CFR Part 63.1510(u)), calculate and record the 3-day, 24-hour rolling average emissions of PM, HCl, and D/F for each secondary aluminum processing unit on a daily basis.	Daily, the permittee shall calculate the 3-day, 24-hour rolling average, by the following procedure: (1) Calculate and record the total weight of material charged to each emission unit in the secondary aluminum processing unit for each 24-hour day of operation using the feed/charge weight information required in Condition No. G.8 (40 CFR Part 63.1510(e)). If the permittee chooses to comply on the basis of weight of aluminum produced by the emission unit, rather than weight of material charged to the emission unit, all performance test emissions results and all calculations must be conducted on the aluminum production weight basis; (2) Multiply the total feed/charge weight to the emission unit, or the weight of aluminum produced by the emission unit, for each emission unit for the 24-hour period by the emission rate (in lb/ton of feed/charge) for that emission unit (as determined during the performance test) to provide emissions for each emission unit for the 24-hour period, in pounds; (3) Divide the total emissions for each SAPU for the 24-hour period by the total material charged to the SAPU, or the weight of aluminum produced by the SAPU over the 24-hour period to provide the daily emission rate for the SAPU; (4) Compute the 24-hour daily emission rate using the following equation:	40 CFR 63.1510(t)

G. Metal Products					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
				$$E_{day} = \frac{\sum_{i=1}^{n}(T_i \times ER_i)}{\sum_{i=1}^{n} T_i}$$ Where, E_{day} = The daily PM, HCl, or D/F emission rate for the secondary aluminum processing unit for the 24-hour period; T_i = The total amount of feed, or aluminum produced, for emission unit i for the 24-hour period (tons); ER_i = The measured emission rate for emission unit i as determined in the performance test (lb/ton or ug/Mg of feed/charge); and n = The number of emission units in the secondary aluminum processing unit; and (5) Calculate and record the 3-day, 24-hour rolling average for each pollutant each day by summing the daily emission rates for each pollutant over the 3 most recent consecutive days and dividing by 3.	
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.15	Secondary Aluminum Processing Unit Compliance by Individual Emission Unit Demonstration	As an alternative to the procedures of Condition No. G.14 (40 CFR Part 63.1510(t)), the permittee may demonstrate, through performance tests, that each individual emission unit within the secondary aluminum production unit is in compliance with the applicable emission limits for the emission unit.		40 CFR 63.1510(u)

G. Metal Products					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.16	Site-specific Test Plan	Prior to conducting a performance test required by this subpart, the permittee must prepare and submit a site-specific test plan meeting the requirements in §63.7(c).	The permittee shall submit the site-specific test plan to Ecology at least 60 calendar days before the performance test is scheduled to take place (simultaneously with the notification of intention to conduct a performance test required by 40 CFR Part 63.7(b)). The test plan shall include a test program summary, the test schedule, data quality objectives, and both an internal and external quality assurance (QA) program. Data quality objectives are the pretest expectations of precision, accuracy, and completeness of data. The internal QA program shall include, at a minimum, the activities planned by routine operators and analysts to provide an assessment of test data precision; an example of internal QA is the sampling and analysis of replicate samples. The external QA program shall include, at a minimum, application of plans for a test method performance audit (PA) during the performance test. The PA's consist of blind audit samples provided by the Administrator and analyzed during the performance test in order to provide a measure of test data bias. The external QA program may also include systems audits that include the opportunity for on-site evaluation by the Administrator of instrument calibration, data validation, sample logging, and documentation of quality control data and field maintenance activities.	40 CFR 63.1511(a); 63.7(b); and 63.7(c)
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.17	Initial Performance Test	Following approval of the site-specific test plan, demonstrate initial compliance with each applicable emission,	Following approval of the site-specific test plan and prior to September 20, 2003 or within 180 days of startup, whichever is later, the permittee shall adhere to the following instructions:	40 CFR 63.1511(b)

G. Metal Products					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
			equipment, work practice, or operational standard for each affected source and emission unit, and report the results in the notification of compliance status report as described in §63.1515(b). Conduct each performance test according to the requirements of the general provisions in subpart A of this part and this subpart.	(1) Conduct each test while the affected source or emission unit is operating at the highest production level with charge materials representative of the range of materials processed by the unit and, if applicable, at the highest reactive fluxing rate. (2) Each performance test for a continuous process must consist of 3 separate runs; pollutant sampling for each run must be conducted for the time period specified in the applicable method or, in the absence of a specific time period in the test method, for a minimum of 3 hours. (3) Each performance test for a batch process must consist of three separate runs; pollutant sampling for each run must be conducted over the entire process operating cycle. (4) Where multiple affected sources or emission units are exhausted through a common stack, pollutant sampling for each run must be conducted for a period of time for all affected sources or emission units to complete 1 entire process operating cycle or for 24 hours, whichever is shorter. (5) Initial compliance with an applicable emission limit or standard is demonstrated if the average of three runs conducted during the performance test is less than or equal to the applicable emission limit or standard.	
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.18	Test Methods		The permittee must use the following methods in appendix A to 40 CFR part 60 to determine compliance with the applicable emission limits or standards: (1) Method 1 for sample and velocity traverses. (2) Method 2 for velocity and volumetric flow rate. (3) Method 3 for gas analysis. (4) Method 4 for moisture content of the stack	40 CFR 63.1511(c)

G. Metal Products					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
				gas. (5) Method 5 for the concentration of PM. (6) Method 9 for visible emission observations. (7) Method 23 for the concentration of D/F. (8) Method 25A for the concentration of THC, as propane.	
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.19	Repeat Tests		The permittee shall conduct a performance test every 5 years following the initial performance test.	40 CFR 63.1511(e)
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.20	Establishment of Monitoring and Operating Parameter Values	Establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by §63.1510 that ensures compliance with the applicable emission limit or standard.	To establish the minimum or maximum value or range, the permittee shall use the appropriate procedures in this section and submit the information required by Condition No. G.33 (40 CFR Part 63.1515(b)(4)) in the notification of compliance status report. The permittee may use existing data in addition to the results of performance tests to establish operating parameter values for compliance monitoring provided each of the following conditions are met to the satisfaction of Ecology: (1) The complete emission test report(s) used as the basis of the parameter(s) is submitted; (2) The same test methods and procedures as required by this subpart were used in the test; (3) No design or work practice changes have been made to the source, process, or emission control equipment since the time of the report; and (4) All process and control equipment operating parameters required to be monitored were monitored as required in this subpart and documented in the test report.	40 CFR 63.1511(g)
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.21	Group 1 Furnace (including melting holding	In the site-specific monitoring plan required by Condition No. G.9 (40 CFR Part 63.1510(o)), include data and information	The permittee shall include in the site-specific monitoring plan (Condition No. G.9) data and information demonstrating compliance with the applicable emission limits.	40 CFR 63.1512(e)

G. Metal Products					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
		furnaces) Without Add-on Air Pollution Control Devices	demonstrating compliance with the applicable emission limits for each group 1 furnace (including a melting/holding furnaces) without add-on air pollution control devices. (1) If the group 1 furnace processes other than clean charge material, conduct emission tests to measure emissions of PM, HCl, and D/F at the furnace exhaust outlet. (2) If the group 1 furnace processes only clean charge, conduct emission tests to simultaneously measure emissions of PM and HCl at the furnace exhaust outlet. A D/F test is not required. Each test must be conducted while the group 1 furnace (including a melting/holding furnace) processes only clean charge. (3) The permittee may choose to determine the rate of reactive flux addition to the group 1 furnace and assume, for the purposes of demonstrating compliance with the SAPU emission limit, that all reactive flux added to the group 1 furnace is emitted. Under these circumstances, the owner or operator is not required to		

G. Metal Products					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
			conduct an emission test for HCl.		
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.22	In-line Fluxer	(1) conduct a performance test to measure emissions of HCl and PM at the outlet of the control device. If the in-line fluxer uses no reactive flux materials, emission tests for PM and HCl are not required. (2) The permittee may choose to determine the rate of reactive flux addition to the in-line fluxer and assume, for the purposes of demonstrating compliance with the SAPU emission limit, that all reactive flux added to the in-line fluxer is emitted. Under these circumstances, permittee is not required to conduct an emission test for HCl.	The permittee shall include in-line fluxer performance testing in the site-specific test plan (Condition G.16), conduct required performance tests (Condition G.17) and include in the OM&M plan (Condition G.11).	40 CFR 63.1512(h)
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.23	Secondary aluminum processing unit	Conduct performance tests as described below in this Requirement. The results of the performance tests are used to establish emission rates in lb/ton of feed/charge for PM and HCl and µg TEQ/Mg of feed/charge for D/F emissions from each emission unit. These emission rates are used for compliance monitoring in the calculation of the 3-day, 24-hour rolling average	The permittee shall include secondary aluminum processing unit performance testing in the site-specific test plan (Condition G.16), conduct required performance tests (Condition G.17) and include in the OM&M plan (Condition G.11).	40 CFR 63.1512(j)

G. Metal Products					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
			emission rates using the equation in §63.1510(t). A performance test is required for: (1) Each group 1 furnace processing only clean charge to measure emissions of PM and either: (i) Emissions of HCl (for the emission limit); or (ii) The mass flow rate of HCl at the inlet to and outlet from the control device (for the percent reduction standard). (2) Each group 1 furnace that processes scrap other than clean charge to measure emissions of PM and D/F and either: (i) Emissions of HCl (for the emission limit); or (ii) The mass flow rate of HCl at the inlet to and outlet from the control device (for the percent reduction standard). (3) Each in-line fluxer to measure emissions of PM and HCl.		
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.24	Feed/charge Weight Measurement		During the emission test(s) conducted to determine compliance with emission limits in a kg/Mg (lb/ton) format, the permittee, for each affected source or emission unit subject to an emission limit in a kg/Mg (lb/ton) of feed/charge format, shall measure (or otherwise determine) and record the total weight of feed/charge to the affected source or emission unit for each of the	40 CFR 63.1512(k)

G. Metal Products					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
				three test runs and calculate and record the total weight. If the permittee chooses to demonstrate compliance on the basis of the aluminum production weight, the permittee shall measure the weight of aluminum produced by the emission unit or affected source instead of the feed/charge weight.	
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.25	Flux Injection Rate		The permittee shall use these procedures to establish an operating parameter value or range for the total reactive chlorine flux injection rate: (1) Continuously measure and record the weight of gaseous or liquid reactive flux injected for each 15 minute period during the HCl and D/F tests, determine and record the 15-minute block average weights, and calculate and record the total weight of the gaseous or liquid reactive flux for the 3 test runs; (2) Record the identity, composition, and total weight of each addition of solid reactive flux for the 3 test runs; (3) Determine the total reactive chlorine flux injection rate by adding the recorded measurement of the total weight of chlorine in the gaseous or liquid reactive flux injected and the total weight of chlorine in the solid reactive flux using the following equation: $W_t = F_1W_1 + F_2W_2$ Where, W_t = Total chlorine usage, by weight; F_1 = Fraction of gaseous or liquid flux that is chlorine; W_1 = Weight of reactive flux gas injected;	40 CFR 63.1512(o)

G. Metal Products					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
				F_2 = Fraction of solid reactive chloride flux that is chlorine (e.g., F = 0.75 for magnesium chloride; and W_2 = Weight of solid reactive flux; (4) Divide the weight of total chlorine usage (Wt) for the 3 test runs by the recorded measurement of the total weight of feed for the 3 test runs; and (5) If a solid reactive flux other than magnesium chloride is used, the permittee shall derive the appropriate proportion factor subject to approval by the applicable permitting authority.	
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.26	Labeling	For each group 1 furnace, group 2 furnace and in-line fluxer, submit the information described in Condition No. G.33 (40 CFR Part 63.1515(b)(3)) as part of the notification of compliance status report to document conformance with the operational standard in Condition No. G.7 (40 CFR Part 63.1506(b)).	The permittee shall submit the compliance status report annually.	40 CFR 63.1512(r)
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.27	Equations for Determining Compliance - PM, HCl and D/F Emission Limits		The permittee shall use the following equation to determine compliance with an emission limit for PM, HCl, and D/F: $$E = \frac{C \times Q \times K_1}{P}$$ Where, E= Emission rate of PM, HCl, or D/F, kg/Mg (lb/ton) of feed; C = Concentration of PM, HCl, or D/F, g/dscm (gr/dscf);	40 CFR 63.1513(b)

G. Metal Products					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
				Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr); K_1 = Conversion factor, 1 kg/1,000 g (1 lb/7,000 gr); and P = Production rate, Mg/hr (ton/hr).	
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.28	Equations for Determining Compliance - Conversion of D/F Measurements to TEQ Units		To convert D/F measurements to TEQ units, the permittee shall use the procedures and equations in "Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and – Dibenzofurans (CDDs and CDFs) and 1989 Update" (EPA-625/3-89-016), available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia, NTIS no. PB 90-145756.	40 CFR 63.1513(d)
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.29	Equations for Determining Compliance - Secondary Aluminum Processing Unit		The permittee shall use the following equation to compute the mass-weighted PM emissions for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit (E_{cPM}) is less than or equal to the emission limit for the secondary aluminum processing unit (L_{cPM}) calculated using the equation in Condition No. G.3 (40 CFR Part 63.1505(k)(1)). $$E_{CPM} = \frac{\sum_{i=1}^{n}(E_{tiPM} \times T_{ti})}{\sum_{i=1}^{n}(T_{ti})}$$ Where, E_{cPM} = The mass-weighted PM emissions for the secondary aluminum processing unit; E_{tiPM} = Measured PM emissions for individual emission unit i;	40 CFR 63.1513(e)(1)

G. Metal Products					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
				T_{ti} = The average feed rate for individual emission unit i during the operating cycle or performance test period; and n = The number of emission units in the secondary aluminum processing unit.	
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.30	Equations for Determining Compliance - Secondary Aluminum Processing Unit		The permittee shall use the following equation to compute the aluminum mass-weighted HCl emissions for the secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit (E_{cHCl}) is less than or equal to the emission limit for the secondary aluminum processing unit (L_{cHCl}) calculated using the equation in Condition No. G.4 (40 CFR Part 63.1505(k)(2)). $$E_{CHCl} = \frac{\sum_{i=1}^{n}(E_{tiHCl} \times T_{ti})}{\sum_{i=1}^{n}(T_{ti})}$$ Where, E_{cHCl} = The mass-weighted HCl emissions for the secondary aluminum processing unit; and E_{tiHCl} = Measured HCl emissions for individual emission unit i.	40 CFR 63.1513(e)(2)
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.31	Equations for Determining Compliance - Secondary Aluminum Processing Unit		The permittee shall use the following equation to compute the aluminum mass-weighted D/F emissions for the secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit ($L_{cD/F}$) calculated using the equation in Condition No. G.5 (40 CFR Part	40 CFR 63.1513(e)(3)

G. Metal Products					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
				63.1505(k)(3)). $$E_{CD/F} = \frac{\sum_{i=1}^{n}(E_{tiD/F} \times T_{ti})}{\sum_{i=1}^{n}(T_{ti})}$$ Where, $E_{cD/F}$ = The mass-weighted D/F emissions for the secondary aluminum processing unit; and $E_{tiD/F}$ = Measured D/F emissions for individual emission unit i.	
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.32	Equations for Determining Compliance - Secondary Aluminum Processing Unit		As an alternative to using the equations in Condition Nos. G.29 to G..31 (40 CFR Part 63.1513(e)(1), (2), and (3)), the permittee may demonstrate compliance for a secondary aluminum processing unit by demonstrating that each existing group 1 furnace is in compliance with the emission limits for a new group 1 furnace in §63.1505(i) and that each existing in-line fluxer is in compliance with the emission limits for a new in-line fluxer in §63.1505(j).	40 CFR 63.1513(e)(4)
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.33	Notification of Compliance Status Report		By May 23, 2003 (within 60 days after the compliance date), the permittee shall submit a notification of compliance status report. The notification shall be signed by the responsible official who must certify its accuracy. A complete notification of compliance status report shall include the information specified in below. If the permittee submits the information specified in this section at different times or in different submittals, later	40 CFR 63.1515(b)

G. Metal Products					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
				submittals may refer to earlier submittals instead of duplicating and resubmitting the information previously submitted. A complete notification of compliance status report must include: (1) All information required in §63.9(h). The permittee must provide a complete performance test report for each affected source and emission unit for which a performance test is required. A complete performance test report includes all data, associated measurements, and calculations (including visible emission and opacity tests); (2) The approved site-specific test plan and performance evaluation test results for each continuous monitoring system (including a continuous emission or opacity monitoring system); (3) Unit labeling as described in Condition No. G.7 (40 CFR Part 63.1506(b)), including process type or furnace classification and operating requirements; (4) The compliant operating parameter value or range established for each affected source or emission unit with supporting documentation and a description of the procedure used to establish the value (e.g., lime injection rate, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature), including the operating cycle or time period used in the performance test; (5) Approved OM&M plan (including site-specific monitoring plan for each group 1 furnace with no add-on air pollution control device); and (6) Startup, shutdown, and malfunction plan, with revisions.	

G. Metal Products					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.34	Startup, Shutdown, and Malfunction Plan/Reports	Develop and implement a written plan as described in §63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. Keep records of each event as required by §63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in §63.6(e)(3).	Upon startup the permittee shall develop a written plan that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process and control systems used to comply with the MACT emission standards. In addition to the information required in §63.6(e)(3), the plan shall include: (1) Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and (2) Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.	40 CFR 63.1516(a)
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.35	Excess Emissions Summary Report	(1) A report shall be submitted if any of these conditions occur during a 6-month reporting period: (a) An excursion of a compliant process or operating parameter value or range (e.g., lime injection rate or screw feeder setting, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature, definition of acceptable scrap, or other approved operating	As required by §63.10(e)(3), the permittee shall submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in §63.10(c). When no deviations of parameters have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period. Each report shall include each of these certifications, as applicable: (1) For each group 1 melting/holding furnace without add-on air pollution control devices and using pollution prevention measures that processes only clean charge material: Each group 1 furnace without add-on air pollution	40 CFR 63.1516(b)

G. Metal Products					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
			parameter). (b) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in §63.6(e)(3). (c) An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of this subpart. (d) A deviation from the 3-day, 24-hour rolling average emission limit for a secondary aluminum processing unit. (2) Submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested.	control devices subject to emission limits in §63.1505(i)(2) processed only clean charge during this reporting period. (2) For each group 2 furnace: Only clean charge materials were processed in any group 2 furnace during this reporting period, and no fluxing was performed or all fluxing performed was conducted using only non-reactive, non-HAP-containing/non-HAP-generating fluxing gases or agents, except for cover fluxes, during this reporting period.	
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.36	Annual Compliance Certifications	For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, certify continuing compliance based upon the following conditions: (1) Any period of excess emissions, as defined in		40 CFR 3.1516(c)

G. Metal Products					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
			40CFR Part 63.1516(b)(1), that occurred during the year were reported as required by this subpart; and (2) All monitoring, recordkeeping, and reporting requirements were met during the year.		
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.37	Records	Maintain files as required by the general provisions of 40 CFR part 63.10(b).	As required by 40 CFR Part 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and Subpart RRR). (1) Retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site. (2) Retain records on microfilm, computer disks, magnetic tape, or microfiche; and (3) The permittee may report required information on paper or on a labeled computer disk using commonly available and Ecology-compatible computer software.	40 CFR 63.1517(a)
IP-1, 2, 3, 4, 11 12 Furnaces # 1, 2, 3, 4, 5, 6, and 11	G.38	Records	Additional recordkeeping requirements.	In addition to the general records required by §63.10(b), the permittee shall maintain records of: (1) For each group 1 furnace (with or without add-on air pollution control devices) or in-line fluxer, records of 15-minute block average weights of gaseous or liquid reactive flux injection, total reactive flux injection rate and calculations (including records of the identity, composition, and weight of each addition of gaseous, liquid or solid reactive flux), including	40 CFR 63.1517(b)

G. Metal Products					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
				records of any period the rate exceeds the compliant operating parameter value and corrective action taken; (2) For each continuous monitoring system, records required by §63.10(c); (3) For each affected source and emission unit subject to an emission standard in kg/Mg (lb/ton) of feed/charge, records of feed/charge (or throughput) weights for each operating cycle or time period used in the performance test; (4) Approved site-specific monitoring plan for a group 1 furnace without add-on air pollution control devices with records documenting conformance with the plan; (5) Records of all charge materials for each group 1 melting/holding furnaces without air pollution control devices processing only clean charge; (6) Records of all charge materials and fluxing materials or agents for a group 2 furnace; (7) Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements; (8) Records of annual inspections of emission capture/collection and closed vent systems; (9) Records for any approved alternative monitoring or test procedure; (10) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including: (i) Startup, shutdown, and malfunction plan; (ii) For major sources, OM&M plan; and (iii) Site-specific secondary aluminum processing unit emission plan (if applicable); and (11) For each secondary aluminum processing unit, records of total charge weight, or if the	

G. Metal Products					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
				owner or operator chooses to comply on the basis of aluminum production, total aluminum produced for each 24-hour period and calculations of 3-day, 24-hour rolling average emissions.	

H. Ore Handling					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
OH-45 Tank 5M dust collector (4570 acfm)	H.1	Particulate Material	Emissions of particulate material shall not exceed 0.005 gr/dscf	The permittee shall conduct an emission test upon Ecology's request. The reference test methods are EPA Test Method 17 (40 CFR Part 60, Appendix A, 7/1/03), or another EPA approved method. Comply with Condition No. I.11.	Order No.02AQIS-3459
	H.2	Opacity	Shall not exceed 5% for more than six minutes in any sixty minute period.	The permittee shall conduct an emission test upon Ecology's request. The reference test method is EPA Test Method 9 (40 CFR Part 60, Appendix A, 7/1/03). If visible emissions are observed at any time, the observation shall be documented and corrective action initiated as soon as practical but not to exceed 24 hours. Comply with Condition No. I.11.	
OH-46 Tank 5M dust collector (3770 acfm)	H.3	Particulate Material	Emissions of particulate material shall not exceed 0.005 gr/dscf	The permittee shall conduct an emission test upon Ecology's request. The reference test methods are EPA Test Method 17 (40 CFR Part 60, Appendix A, 7/1/03), or another EPA approved method. Comply with Condition No. I.11.	

H. Ore Handling					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
	H.4	Opacity	Shall not exceed 5% for more than six minutes in any sixty minute period.	The permittee shall conduct an emission test upon Ecology's request. The reference test method is EPA Test Method 9 (40 CFR Part 60, Appendix A, 7/1/03). If visible emissions are observed at any time, the observation shall be documented and corrective action initiated as soon as practical but not to exceed 24 hours. Comply with Condition No. I.11.	
OH-2 (43e dust collector-alumina railcar unloading, 44740 acfm.)	H.5	Particulate Material	Emissions of particulate material shall not exceed 0.1 gr/dscf	The permittee shall conduct an emission test once every five years and upon Ecology's request. The reference test methods are EPA Test Method 5 (40 CFR Part 60, Appendix A, 7/1/03), or another EPA approved method. Concurrently with the particulate matter emission test, the permittee shall conduct a visible emission observation or EPA Test Method 9. Record the time and duration of visible emissions during the particulate matter emission test. Comply with Condition No. I.11. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]	WAC 173-400-060 [effective 3/22/91, approved into the SIP on 8/20/93]
	H.6	Opacity	Opacity shall not exceed 20% for more than six minutes in any sixty minute period.	The permittee shall conduct an emission test upon Ecology's request. The reference test method is EPA Test Method 9 (40 CFR Part 60, Appendix A, 7/1/03). If visible emissions are observed at any time, the observation shall be documented and corrective action initiated as soon as practical but not to exceed 24 hours. Comply with Condition No. I.11. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]	WAC 173-415-030(3) [approved into the SIP on 2/19/91; state rule effective 3/22/91]

H. Ore Handling					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
OH-5 (40a dust collector-bath crusher 52,470 acfm)	H.7	Particulate Material	Emissions of particulate material shall not exceed 0.1 gr/dscf	The permittee shall conduct an emission test once every five years and upon Ecology's request. The reference test methods are EPA Test Method 5 (40 CFR Part 60, Appendix A, 7/1/03), or another EPA approved method. Concurrently with the particulate matter emission test, the permittee shall conduct a visible emission observation or EPA Test Method 9. Record the time and duration of visible emissions during the particulate matter emission test. Comply with Condition No. I.11. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]	WAC 173-400-060 [effective 3/22/91, approved into the SIP on 8/20/93]
	H.8	Opacity	Opacity shall not exceed 20% for more than six minutes in any sixty minute period.	The permittee shall conduct an emission test upon Ecology's request. The reference test method is EPA Test Method 9 (40 CFR Part 60, Appendix A, 7/1/03). If visible emissions are observed at any time, the observation shall be documented and corrective action initiated as soon as practical but not to exceed 24 hours. Comply with Condition No. I.11. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]	WAC 173-415-030(3) [approved into the SIP on 2/19/91; state rule effective 3/22/91]
OH-6 (160 T-710 dust collector, 6160 acfm)	H.9	Particulate Material	Emissions of particulate material shall not exceed 0.1 gr/dscf	The permittee shall conduct an emission test upon Ecology's request. The reference test methods are EPA Test Method 5 (40 CFR Part 60, Appendix A, 7/1/03), or another EPA approved method. Concurrently with the particulate matter emission test, the permittee shall conduct a visible emission observation or EPA Test Method 9. Record the time and duration of visible emissions during the particulate matter emission test. Comply with Condition No. I.11. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]	WAC 173-400-060 [effective 3/22/91, approved into the SIP on 8/20/93]

H. Ore Handling					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
	H.10	Opacity	Opacity shall not exceed 20% for more than six minutes in any sixty minute period.	The permittee shall conduct an emission test upon Ecology's request. The reference test method is EPA Test Method 9 (40 CFR Part 60, Appendix A, 7/1/03). If visible emissions are observed at any time, the observation shall be documented and corrective action initiated as soon as practical but not to exceed 24 hours. Comply with Condition No. I.11. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]	WAC 173-415-030(3) [approved into the SIP on 2/19/91; state rule effective 3/22/91]
OH-8 (160 T-730 dust collector, 6160 acfm)	H.11	Particulate Material	Emissions of particulate material shall not exceed 0.1 gr/dscf	The permittee shall conduct an emission test upon Ecology's request. The reference test methods are EPA Test Method 5 (40 CFR Part 60, Appendix A, 7/1/03), or another EPA approved method. Concurrently with the particulate matter emission test, the permittee shall conduct a visible emission observation or EPA Test Method 9. Record the time and duration of visible emissions during the particulate matter emission test. Comply with Condition No. I.11. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]	WAC 173-400-060 [effective 3/22/91, approved into the SIP on 8/20/93]
	H.12	Opacity	Opacity shall not exceed 20% for more than six minutes in any sixty minute period.	The permittee shall conduct an emission test upon Ecology's request. The reference test method is EPA Test Method 9 (40 CFR Part 60, Appendix A, 7/1/03). If visible emissions are observed at any time, the observation shall be documented and corrective action initiated as soon as practical but not to exceed 24 hours. Comply with Condition No. I.11. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]	WAC 173-415-030(3) [approved into the SIP on 2/19/91; state rule effective 3/22/91]

H. Ore Handling					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
OH-15 (161-730 dust collector – airlift baghouse, 4520 acfm)	H.13	Particulate Material	Emissions of particulate material shall not exceed 0.1 gr/dscf	The permittee shall conduct an emission test upon Ecology's request. The reference test methods are EPA Test Method 5 (40 CFR Part 60, Appendix A, 7/1/03), or another EPA approved method. Concurrently with the particulate matter emission test, the permittee shall conduct a visible emission observation or EPA Test Method 9. Record the time and duration of visible emissions during the particulate matter emission test. Comply with Condition No. I.11. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]	WAC 173-400-060 [effective 3/22/91, approved into the SIP on 8/20/93]
	H.14	Opacity	Opacity shall not exceed 20% for more than six minutes in any sixty minute period.	The permittee shall conduct an emission test upon Ecology's request. The reference test method is EPA Test Method 9 (40 CFR Part 60, Appendix A, 7/1/03). If visible emissions are observed at any time, the observation shall be documented and corrective action initiated as soon as practical but not to exceed 24 hours. Comply with Condition No. I.11. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]	WAC 173-415-030(3) [approved into the SIP on 2/19/91; state rule effective 3/22/91]
OH-30 (19 T-720 dust collector, 6160 acfm)	H.15	Particulate Material	Emissions of particulate material shall not exceed 0.1 gr/dscf	The permittee shall conduct an emission test upon Ecology's request. The reference test methods are EPA Test Method 5 (40 CFR Part 60, Appendix A, 7/1/03), or another EPA approved method. Concurrently with the particulate matter emission test, the permittee shall conduct a visible emission observation or EPA Test Method 9. Record the time and duration of visible emissions during the particulate matter emission test. Comply with Condition No. I.11. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]	WAC 173-400-060 [effective 3/22/91, approved into the SIP on 8/20/93]

H. Ore Handling					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
	H.16	Opacity	Opacity shall not exceed 20% for more than six minutes in any sixty minute period.	The permittee shall conduct an emission test upon Ecology's request. The reference test method is EPA Test Method 9 (40 CFR Part 60, Appendix A, 7/1/03). If visible emissions are observed at any time, the observation shall be documented and corrective action initiated as soon as practical but not to exceed 24 hours. Comply with Condition No. I.11. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]	WAC 173-415-030(3) [approved into the SIP on 2/19/91; state rule effective 3/22/91]

I. Facility Wide Generally Applicable Requirements					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
	I.1	Visible Emissions	Opacity shall not exceed an average of 20% opacity for more than six consecutive minutes in any 60-minute period.	The permittee shall conduct an emission test upon Ecology's request. The reference test method is EPA Test Method 9 (40 CFR Part 60, Appendix A, 7/1/99).	WAC 173-415-030(3) [approved into the SIP on 2/19/91; state rule effective 3/22/91]
	I.2	Fallout	No person shall cause or permit the emission of particulate matter from any source to be deposited beyond the property under direct control of the permittee in sufficient quantity to interfere unreasonably with the use and enjoyment of the property upon which the material is deposited.	The permittee shall conduct investigations of any reports of excessive fallout and maintain records of: (1) each report of fallout by operational staff or complaint of excessive fallout received; (2) the results of the investigation into the validity and/or cause of the excessive fallout; (3) corrective action taken, if any, to eliminate the excessive fallout; and (4) the time the action was initiated and completed. The permittee shall initiate corrective action within 24 hours of complaint when any valid complaint is received. If corrective actions are not completed within 24 hours of complaint receipt, notify Ecology at first opportunity during normal office hours. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]	WAC 173-400-040(2) [effective 3/22/91; not submitted for SIP approval] State-only requirement
	I.3	Fugitive Emissions	Use RACT to prevent fugitive emissions.	Minimum requirements for reasonable precautions to control fugitive emissions may include but are not limited to: using dust suppressant agents (water, lignosulfate, etc.); minimizing emissions from material transfer and conveyance systems; keeping building doors, vents, openings closed; in the paste plant ensure that the shrouds and hoods are in place, etc. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]	WAC 173-415-030(4) [effective 3/22/91; approved into the SIP on 2/19/91]
	I.4	Odor	Use recognized good practice and procedures to reduce odors which may unreasonably interfere with any other property owner's use and enjoyment of his	The permittee shall conduct investigations of any reports of odor and maintain records of: (1) each report of odor by operational staff or complaint of odors received; (2) the results of the investigation into the validity and/or cause of the odors; (3) corrective action taken, if any, to eliminate or reduce the odor; and (4) the time the action was initiated and	WAC 173-400-040(4) [3/22/91; not submitted for SIP approval] State-only

I. Facility Wide Generally Applicable Requirements					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
			property to a reasonable minimum,.	completed. The permittee shall initiate corrective action within 24 hours of complaint when any valid complaint is received. If corrective actions are not completed within 24 hours of complaint receipt, notify Ecology at first opportunity during normal office hours. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]	Requirement
	I.5	Emissions Detrimental to Persons or Property	Permittee shall not cause or permit the emissions of any air contaminant from any source if it is detrimental to the health, safety, or welfare of any person, or causes damage to property or business	The permittee shall conduct investigations of any reports of detrimental emissions and maintain records of: (1) each report of detrimental emissions by operational staff or complaint of detrimental emissions received; (2) the results of the investigation into the validity and/or cause of the detrimental emissions; (3) corrective action taken, if any, to eliminate or reduce the detrimental emissions; and (4) the time the action was initiated and completed. The permittee shall initiate corrective action within 24 hours of complaint when any valid complaint is received. If corrective actions are not completed within 24 hours of complaint receipt, notify Ecology at first opportunity during normal office hours. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]	WAC 173-400-040(5) [3/22/91; approved into the SIP on 8/20/93]
	I.6	Sulfur Dioxide - Mass Limit	Total emissions of sulfur dioxide from all emissions units shall not exceed sixty pounds of sulfur dioxide per ton of aluminum produced on a monthly average.	The permittee shall conduct emission testing upon Ecology's request. The reference test method is EPA Test Method 6, 6A, 6B, 6C, or 8 (40 CFR Part 60, Appendix A, 7/1/99) or another EPA approved method. The permittee shall conduct emission testing quarterly as a substitute for mass balance calculation described below. The permittee shall analyze each incoming load or batch of coke and pitch for sulfur content using the procedures in ASTM D3177, D4239 or other applicable ASTM method. Measure aluminum production daily. Calculate sulfur dioxide emissions from a mass balance calculation (making the assumption that all sulfur not released as COS	WAC 173-415-030(5)(a) [3/22/91; approved into the SIP on 2/19/91]

I. Facility Wide Generally Applicable Requirements					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
				converts to sulfur dioxide), using a weighted daily aluminum production rate for the period of concern, and using a weighted average sulfur content representative of all raw materials consumed during the period of concern. The permittee shall calculate the monthly sulfur dioxide emission rate by the following equation: Pounds SO_2/ton Al = ($\Sigma C x S_C + \Sigma P x S_P + \Sigma O x S_O$) x 40/Al where C, P, and O are the coke, pitch, and fuel oil usage during the month from each shipment, in tons; S_C, S_P, and S_O are the sulfur concentration of each shipment of coke, pitch or fuel oil respectively, expressed as a percentage; and Al is the aluminum production for the month. Quarterly, the permittee shall submit the Pounds SO_2/ton Al. The submission must include records of raw material usage, representative raw material sulfur analysis, and aluminum production rate. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]	
	I.7	Sulfur Dioxide - Concentration Limit	Emissions of sulfur dioxide shall not exceed 1000 ppm corrected to dry standard conditions for an hourly average.	Upon Ecology's request, the permittee shall conduct an emission test. The reference test method is EPA Test Method 6 (40 CFR Part 60, Appendix A, 7/1/03) The permittee shall comply with Condition No. I.6. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]	WAC 173-415-030(5)(b) [3/22/91; approved into the SIP on 2/19/91] *WAC 173-400-040(6), first paragraph*
	I.8	Fugitive Dust	Take reasonable precautions to prevent fugitive dust from becoming airborne and shall maintain and	The permittee shall comply with Condition No. I.3. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]	WAC 173-400-040(8)(a) [effective 3/22/91; approved into the SIP on 8/20/93]

I. Facility Wide Generally Applicable Requirements					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
			operate the source to minimize emissions.		
	I.9	Particulate Material	Emissions of particulate material from any combustion and incineration unit and from any general process operations shall not exceed 0.1 grains/dscf.	The permittee shall conduct an emission test at Ecology's request. The reference test methods are EPA Test Method 5 or 17 (40 CFR Part 60, Appendix A, 7/1/99); or EPA Method 301 Equivalent (40 CFR Part 63, Appendix A, 7/1/99). [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]	WAC 173-400-050(1) [effective 3/22/91; approved into the SIP on 8/20/93] And WAC 173-400-060 [effective 3/22/91; approved into the SIP on 8/20/93]
	I.10	Fluoride emissions. State Only	The emission of gaseous and particulate fluorides for all emissions units shall be restricted so that the plant's emissions will not cause ambient air and forage standards for fluorides established by chapter 173-481 WAC to be exceeded outside the property controlled by the permittee.	The permittee is deemed to be in compliance with Chapter 173-481 WAC provided: 1) Annually, prior to the start of the growing season (March through October), the permittee certifies that gaseous fluoride emissions have not exceeded 327 lbs/day at any time during the preceding 12 months. 2) Annually, prior to the start of the growing season, the permittee conducts a survey and certifies that no livestock is raised within a five mile radius of the plant site. 3) The permittee conducts a vegetation survey in July or August of every year and submits a report to Ecology within 90 days of the completion of the survey. The purpose of the vegetation survey is to determine the permittee's gaseous fluoride impacts on surrounding vegetation. Ecology may impose additional requirements if: the permittee's gaseous fluoride exceeds 327 lbs/day; or,	WAC 173-481 WAC 173-415-030(1)(a) WAC 173-415-060(1)(a&b)

I. Facility Wide Generally Applicable Requirements					
Emission Unit	Condition No.	Parameter	Requirement	Monitoring, Reporting and Recordkeeping	Basis of Authority
				livestock are grazed within five miles of the plant; or, an annual vegetation survey is not submitted to Ecology in a timely manner.	
	I.11	Operation and maintenance Consistent with Good Air Pollution Control Practices	At all times, including periods of abnormal operation and upset, the permittee shall, to the extent practicable, operate and maintain air pollution control equipment in a manner consistent with good air pollution control practice.	Weekly, the permittee shall conduct a functional integrity inspection of all identified emission units. The inspections, at a minimum, must include physical, visual checks for the following: visible emissions from any emission unit, noticeable leaks in ductwork and housing, excessive vibrations, pressure drop, and sight glass readings when available. Initiate corrective action for any abnormal operation and upset as soon as practical but not to exceed 24 hours. Maintain records of the inspections, pressure drop, sight glass readings, corrective actions and emission tests. [WAC 173-401-615(1)(b) & WAC 173-401-630(1)]]	WAC 173-415-030(6) [3/22/91; approved into the SIP on 2/19/91]

SECTION III: STANDARD TERMS AND CONDITIONS OF THE PERMIT

III.1. Duty to comply — WAC 173-401-620(2)(a)

The permittee must comply with all conditions of this chapter 401 permit. Any permit noncompliance constitutes a violation of chapter 70.94 RCW and, for federally enforceable provisions, a violation of the FCAA. Such violations are grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

III.2. Need to halt or reduce activity not a defense — WAC 173-401-620(2)(b)

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit."

III.3. Permit actions — WAC 173-401-620(2)(c)

This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

III.4. Property rights — WAC 173-401-620(2)(d)

This permit does not convey any property rights of any sort, or any exclusive privilege.

III.5. Duty to Provide Information — WAC 173-401-620(2)(e)

The permittee shall furnish to the permitting authority, within a reasonable time, any information that the permitting authority may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the permitting authority copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the EPA Administrator along with a claim of confidentiality. Permitting authorities shall maintain confidentiality of such information in accordance with RCW 70.94.205.

III.6. Permit fees — WAC 173-401-620(2)(f)

The permittee shall pay fees as a condition of this permit in accordance with Ecology's fee schedule. Failure to pay fees in a timely fashion shall subject the permittee to civil and criminal penalties as prescribed in chapter 70.94 RCW

III.7 Emissions Trading WAC 173-401-620(2)(g)

No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

III.8 Severability Clause WAC 401-620(2)(h)

If any provision of this permit is held to be invalid, all unaffected provisions of the permit shall remain in effect and be enforceable.

III.9 Permit Appeals WAC 173-401-620(2)(i)

The permittee may appeal this permit or any conditions in it only by filing an appeal with the pollution control hearings board and serving it on the permitting authority within thirty days of receipt pursuant to RCW 43.21B.310. This provision for appeal in this section is separate from and additional to any federal rights to petition and review under § 505(b) of the FCAA.

III.10 Permit Continuation WAC 173-401-620(2)(j)

This permit and all terms and conditions contained therein, including any permit shield provided under WAC 173-401-640, shall not expire until the renewal permit has been issued or denied if a timely and complete application has been submitted.

III.11 Federally Enforceable Requirements WAC 173-401-625

All terms and conditions of this permit, including any provisions designed to limit potential to emit, are enforceable by EPA and citizens under the FCAA, unless they are specifically designated as not federally enforceable.

III.12 Reopening for Cause WAC 173-401-730

This permit shall be reopened and revised under any of the following circumstances:

(a) Additional applicable requirements become applicable when the remaining permit term is greater than three years. Such reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to WAC 173-401-620(2)(j).
(b) Additional requirements (including excess emissions requirements) become applicable under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated in the permit.

(c) Ecology determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
(d) Ecology determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

Procedures to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists.

III.13 Tampering and False Statements — WAC 173-400-105(7) and (8) and 40 CFR 70.11(a)

No person shall make any false materials statement, representation or certification in any form, notice or report required in this permit. No person shall render inaccurate any monitoring device or method required under this permit.

SECTION IV: GENERAL TERMS AND CONDITIONS OF THE PERMIT:

Recordkeeping Terms & Conditions

IV.1 Monitoring Records — WAC 173-401-615(2)(a) and WAC 173-400-105

The permittee shall keep records of any periodic and continuous monitoring required by this permit. These records shall include the following, where applicable:
(i) The date, place as defined in the permit, and time of sampling or measurements;
(ii) The date(s) analyses were performed;
(iii) The company or entity that performed the analyses;
(iv) The analytical techniques or methods used;
(v) The results of such analyses; and
(vi) The operating conditions existing at the time of sampling or measurement;

IV.2 Inspection Checklists — WAC 173-401-615(1)(b)

Where the permittee is required to use and maintain an inspection checklist, the checklist must contain, at a minimum, the following information:

(i) The person conducting the inspection
(ii) The date/time of the inspection
(iii) Location of the inspection
(iii) The observations made during the inspection
(iv) Corrective actions taken if any
(v) The date and time corrective action was initiated and completed

IV.3 Changes at Source WAC 173-401-615(2)(b)

The permittee shall keep records describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

IV.4 Records Retention WAC 173-401-615(2)(c)

The permittee shall retain records of all required monitoring data and support information for a period of 5 years from the date of monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all data from continuous monitoring instrumentation, and copies of all reports required by this permit.

IV.5 Recording of Permit Deviations WAC 173-401-615(3)(b)

The source shall maintain a contemporaneous record of all deviations including the date and nature of the deviation.

Reporting Terms & Conditions

IV.6 Certifications WAC 173-401-520

Any application form, report, or compliance certification submitted pursuant to Chapter 173-401 WAC shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under Chapter 173-401 WAC shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

IV.7 Monthly Reports WAC 173-401-615(3)(a) and WAC 173-415-060

Results of monitoring shall be reported within 30 days of the last calendar day of each month. All instances of deviations from permit requirements must be clearly identified in such reports.

IV.8 Permit Deviations/Excess Emissions WAC 173-401-615(3)(b) and WAC 173-400-107

The permittee shall promptly submit a report of any deviations from permit conditions.

A. For purposes of this permit, submitting a report "promptly" means the following: (1) if the deviation presents a potential threat to human health or safety, the report shall be made as soon as possible but no later than 12 hours after the discovery of the deviation; (2) for other deviations, "promptly" means that the deviations are identified in the respective monthly report.
B. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken. The permittee may include in its reports demonstrations

that excess emissions were unavoidable, consistent with the requirements of WAC 173-400-107.

IV.9 Emission Inventory	WAC 173-415-080 and WAC 173-400-105(1)

The permittee shall submit an inventory of emissions, as specified in WAC 173-415-080, from the source each year no later than 105 days after the end of the calendar year. The permittee shall maintain records of information necessary to substantiate any reported emissions.

IV.10 Compliance Requirements/Certification	WAC 173-401-510(2)(h)(iii), WAC 173-401-600, WAC 173-401-630(3), and WAC 173-401-630 (5)

A. The permittee shall continue to comply with applicable requirements with which the permittee is in compliance;
B. The permittee shall meet applicable requirements that will become effective during the permit period on a timely basis;
C. The permittee shall submit a report to the Department of Ecology and to Region 10 of EPA 12 months after the effective date of this permit and annually thereafter certifying compliance with the terms and conditions contained in this permit. The certification shall describe the following:
   i. the permit term or condition that is the basis of the certification;
   ii. the compliance status;
   iii. whether compliance was continuous or intermittent; and
   iv. the methods used for determining compliance, currently and over the reporting period consistent with required monitoring.
D. The permittee is not required to certify compliance for insignificant emission units or activities. [WAC 173-401-530(2)(d)]

IV.11 Report Address

All reports, renewal applications, and compliance certifications required by this permit shall be submitted to:

Department of Ecology
Industrial Section
P.O. Box 47706
Olympia, WA 98504-7706

Compliance certification shall also be submitted to:

Environmental Protection Agency
Air Operating Permits, Region 10
1200 Sixth Avenue, OAQ-108
Seattle, WA 98101-1128

Other Terms & Conditions of the Permit

IV.12 Asbestos — WAC 173-400-075

The permittee shall comply with 40 CFR Part 61, subpart M (asbestos NESHAP) and WAC 173-400-075 when conducting any renovation or demolition at the facility.

IV.13 Concealment and Masking — WAC 173-400-040(7)

The permittee shall not install or use any means that conceal or mask an emission of an air contaminant that would otherwise violate provisions in this permit.

IV.14 Inspection and Entry — WAC 173-401-630(2)

Inspection and entry. The permittee shall allow the permitting authority or an authorized representative to perform the following upon presentation of credentials and other documents as may be required by law:
(a) Enter upon the permittee's premises where a chapter 401 source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
(c) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
(d) As authorized by WAC 173-400-105 and the FCAA, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

IV. 15 Application and Issuance of a Renewal Permit — WAC 173-401-710(1)&(2)

The permittee shall submit a complete permit renewal application to Ecology no later than six months, but no earlier than 18 months, prior to the expiration date of the existing permit. Permits being renewed are subject to the same procedural requirements, including those for public participation, affected state and EPA review that apply to the initial permit.

IV.16 Stratospheric Ozone Protection	40 CFR Section 82 and RCW 70.94.970 (the RCW is a state-only requirement)

A. The permittee shall comply with applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditions (MVACs) in Subpart B:
   i. Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to § 82.156.
   ii. Equipment used during the maintenance, service, repair or disposal must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
   iii. Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technical certification program pursuant to § 82.161.
   iv. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to § 82.166 ("MVAC-like appliance" is defined at § 82.152.)
   v. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
   vi. Owners/operators of appliances normally containing 50 or more pounds or refrigerant purchased and added to such appliances pursuant to § 82.166."

B. Permittee may switch from any ozone-depleting substance to any alternative approved pursuant to the Significant New Alternatives Program (SANP), 40 CFR Part 82, Subpart G, without a permit revision but shall not switch to a substitute listed as unacceptable pursuant to such program. [40 CFR 82.174]

C. Any certified technician employed by Permittee shall keep a copy of their certification at their place of employment. [40 CFR 82.166(1)]

D. The Permittee shall not willfully release any regulated refrigerant and shall use refrigerant extraction equipment to recover regulated refrigerant that would otherwise be released into the atmosphere. [RCW 7070.94.970(2), 970(4)] State Only

E. Compliance with this term and condition will be demonstrated by using a certified contractor or employee.

IV.17 Insignificant Emission Units	WAC 173-401-530(2)(b)

The generally applicable requirements that apply to IEUs are, WAC 173-415-030, WAC 173-400-040, WAC 173-400-050(1) & (3), and WAC 173-400-060.

IV.18 Providing Additional Data	WAC 173-415-060(2)

For Ecology to evaluate a plant's emissions or emission control program, each primary aluminum plant shall furnish other data requested by Ecology.

SECTION V: PERMIT SHIELD/ INAPPLICABLE REQUIREMENTS

Pursuant to WAC 173-401-640(1), compliance with the terms and conditions of this permit shall be deemed compliance with the applicable requirements identified in this permit, as of the date of permit issuance. This permit shield does not exempt the permittee from requirements enacted after the permit issuance date. This permit shield shall not apply to any insignificant emission unit or activity designated under WAC 173-401-530.

Pursuant to WAC 173-401-640(2), the Department of Ecology has determined that the requirements listed below do not apply to the facility, as of the date of permit issuance, for the reasons specified.

INAPPLICABLE REQUIREMENTS	
Regulatory Citation	**Reason for Inapplicability**
40 CFR 60, Subpart S Standards of Performance for Primary Aluminum Reduction Plants	The facility was constructed before October 23, 1974 and was not modified or reconstructed after that date.
RCW 70.94.610 Burning Used Oil Fuel in Land-based Facilities	The facility does not burn used oil.
RCW 70.94.650 Burning Permits for Weed Abatement, Fire Fighting Instruction and Agricultural Activities	The facility does not engage in any of the covered burning activities.
RCW 70.94.743 Outdoor Burning--Areas Where Prohibited	The facility does not conduct outdoor burning
RCW 70.94.775 Outdoor Burning--Fires Prohibited—Exceptions	The facility does not conduct outdoor burning
RCW 70.94.531 Transportation demand management	Alcoa is not in an effected County
WAC 173-400-040(1) Emission Standards for opacity	Requirement is superceded by WAC 173-415-030(3).
WAC173-400-040(8)(b) Fugitive emissions	Facility is not a significant contributor to the non-attainment status of any designated PM-10 non-attainment area.
WAC 173-400-050(2) (9/20/93) Emission Standards for Incinerators	None of the facility's emission units are "incinerators" as that term is defined in WAC 173-400-030.
WAC 173-400-070 Emission standards for certain source categories	None of the listed categories are found at the Wenatchee Works.
WAC173-400-100 Registration of sources	Not applicable because WAC173-400-101(7) exempts sources subject to operating permit program from registration requirements of WAC173-400-100 through104. (see SIP)
WAC173-040-102 Scope of registration and reporting	Not applicable because WAC173-400-101(7) exempts sources subject to operating permit program from registration requirements of WAC173-400-100 through104
WAC173-400-103 Emission estimates	Not applicable because WAC173-400-101(7) exempts sources subject to operating permit program from registration requirements of WAC173-400-100 through104
WAC173-400-104 Registration fees	Not applicable because WAC173-400-104(4) exempts sources subject to interim operating permit fee from paying an interim registration fee.
WAC 173-400-105(5) Continuous monitoring and reporting	None of the listed categories are found at the Wenatchee Works.
WAC173-400-112 Requirements for new sources in non-attainment areas	Wenatchee is not located in a non-attainment

INAPPLICABLE REQUIREMENTS	
Regulatory Citation	**Reason for Inapplicability**
	area.
WAC 173-400-115 Standards of performance for new sources	The facility was constructed before October 23, 1974 and was not modified or reconstructed, as defined by NSPS, after that date.
WAC 173-400-120 Bubble Rules	The facility has not applied for a bubble.
WAC 173-400-131 Issuance of Emission Reduction Credits	The facility has not applied for emission reduction credits.
WAC 173-400-136 Use of Emission Reduction Credits	The facility does not have and has not used emission reduction credits.
WAC 173-400-151 (9/20/93) Retrofit Requirements For Visibility Protection	The facility has not been determined to cause or contribute to a visibility impairment.
WAC173-400-210 Emission requirements	Facility was not regulated by a local air authority.
WAC 173-406 Acid Rain Regulation	Not applicable because the Wenatchee Works in not an "affected source" within the meaning of WAC 173-406-101(9).
WAC 173-415-030(1)(b) Collection Efficiency	Requirement is superceded by 40CFR Part 63, Subpart LL.
Chapter 173-421 WAC Emission Control Systems	The facility does not perform work on motor vehicle emission systems.
Chapter 173-422 WAC Motor Vehicle Emissions	Not applicable because applicable requirements apply only to "emission units in a Chapter 401 source," per WAC 173-401-200(4), and motor vehicles are not "emission units," as defined in WAC 73-401-200(11).
Chapter 173-425 WAC (9/17/90) Open Burning	The facility's operations do not include open burning.
Chapter 173-430 WAC Agricultural Burning	Not applicable because there are no "agricultural operations," as defined in WAC 173-430-020(1), at the Wenatchee Works
Chapter 173-433 WAC (9/17/90) Solid Fuel Burning Device Standards	The facility's emission units are not "solid fuel burning devices" as defined in WAC 173-433-030(9).
Chapter 173-434 WAC (9/17/90) Solid Waste Incinerator Facilities	None of the facility's emission units are incinerators burning a solid waste fuel, within the meaning of WAC 173-434-030.
WAC173-470 Ambient air quality standards for particulate matter	Not source specific applicable requirements.
WAC173-474 Ambient air standards for sulfur oxides	Not source specific applicable requirements.
WAC173-475 Ambient air quality standards for carbon monoxide,ozone and nitrogen dioxide	Not source specific applicable requirements.
WAC173-480 Ambient air quality standards for radionuclides	Not source specific applicable requirements.
WAC 173-490-030 (2/19/91) Registration and Reporting--Petroleum liquid storage tanks.	The facility does not have any petroleum liquid storage tanks.
WAC 173-490-040(2) (2/19/91) Petroleum Liquid Storage Tanks	The facility does not have any petroleum liquid storage tanks.
WAC 173-490-040(6) (2/19/91) Surface Coaters	It does not apply to any of the emission units at the facility.
WAC 173-490-040(7) (2/19/91) Open Top Vapor Degreasers	It does not apply to any of the emission units at the facility.
WAC 173-490-040(8) (2/19/91) Conveyorized Degreasers	It does not apply to any of the emission units at the facility.

INAPPLICABLE REQUIREMENTS	
Regulatory Citation	**Reason for Inapplicability**
WAC 173-490-040(9) (2/19/91) Cutback Asphalt Paving	The facility does not engage in the activity subject to requirements of this subsection.
WAC 173-490-040(10) (2/19/91) Cold Cleaners	It does not apply to any of the emission units at the facility.
WAC 173-490-080 (2/19/91) Exceptions and Alternative Methods	Subsection (1) not applicable because facility has not applied for an alternative emission reduction method. Subsection (2) The facility does not have a gas-fired incinerator used to comply with the requirements of this chapter.
WAC 173-490-201 (2/19/91) Petroleum Liquid Storage In External Floating Roof Tanks	The facility does not have any petroleum liquid storage tanks.
WAC 173-490-205 (2/19/91) Surface Coating of Miscellaneous Metal Parts and Products	The facility does not engage in the surface coating of metal parts or products.
WAC463-39 EFSEC General regulations	Applies only to facilities under the jurisdiction of EFSEC.
Ecology Order DE 90-I035 Request Monitoring Plan	The requirement was met by submittal of updated monitoring plan. Wenatchee has submitted monitoring plan.
FCAA Title IV, Acid Deposition Control	Not applicable because the Wenatchee Work has not volunteered to participate.
FCCA section 183(e) Standards for VOC-emitting Products	Not applicable because the Wenatchee Works is not a "regulated entity" within the meaning of FCAA section 183(e)(1)©, and because EPA has not promulgated any rules under section 183(e) that regulated primary aluminum smelters.
FCCA section 183(f) Tank vessel Standards	Applies only to loading and unloading of marine vessels carrying petroleum products. This activity does not occur at Wenatchee.
FCCA section 328 Standards to control air pollution from outer continental shelf sources	Not applicable because the Wenatchee Works is not an "Outer Continental Shelf Source" within the meaning of FCAA section 328(a)(1).

SECTION VI: ABBREVIATIONS

avg	average
BACT	best available control technology
BTU	British thermal unit
CEM	continuous emission monitor
CO	carbon monoxide
DOE	Department of Ecology
dscf	dry standard cubic foot
EPA	Environmental Protection Agency
FCAA	Federal Clean Air Act
gpm	gallons per minute
gt&c	general terms and conditions
g/m^3	grams per cubic meter
gr	grain
HAP	hazardous air pollutant
IEU	insignificant emission unit
kg	kilogram
lbs	pounds
MACT	maximum available control technology
$\mu g/m^3$	micrograms per cubic meter
MMBTU	million British thermal units
NOx	nitrogen oxides
NSPS	new source performance standards
PM	particulate matter
PM_{10}	particulate matter less than 10 microns in diameter
POM	polycyclic organic matter
ppm	parts per million
ppmdv	part per million dry volume
PSD	prevention of significant deterioration
RCW	Revised Code of Washington
RACT	reasonable available control technology
SERP	source emission reduction plan
SIP	state implementation plan
SO_2	sulfur dioxide
tpy	tons per year
U.S.C.	United States Code
VOC	volatile organic compound
VE	visible emissions
WAC	Washington Administrative Code